

NEWS SUMMARY

GENERAL BUSINESS

Police warning over bombs

Police are warning the public to take special care with letters and parcels after the wave of bombings in five English cities early yesterday.

The explosions—in Liverpool, Coventry, Manchester, Bristol and Southampton—carried the hallmarks of the Provisional IRA according to senior police officers.

Nine people were injured in the blasts, which caused extensive damage to property. No warnings were given.

Police believe the bombings could be the start of an extensive pre-Christmas campaign by the Provisionals, taking advantage of crowded shops and the huge increase in mail.

Civilians shot

Rhodesian police killed five black civilians in a township 10 miles from Salisbury during a hunt for guerrillas. A statement said the men had tried to flee when they were challenged.

Sect 'murders'

The Guyana Government's chief medical examiner believes at least 700 of the 811 people who died at Jonestown were murdered. Dr. Leslie Mootoo told the Chicago Tribune that half the people at Jonestown had died from poison injections which could not have been self-administered.

BBC talks

The BBC will hold talks with the Association of Broadcasting Staffs this week over the overtime ban which could severely hit Christmas programmes.

Peace deadline

President Carter's target date for an Egyptian-Israeli peace agreement passed with negotiations still deadlocked. The Israeli Cabinet met but did not discuss the peace plan.

Promotion call

A Civil Service Department report says fewer graduates should be recruited for rapid promotion so that existing staff had better promotion prospects.

Pilot shortage

The recovery in air travel is producing a severe pilot shortage. UK airlines are likely to need upwards of 200 extra pilots by the early 1980s.

England ahead

England have a commanding lead of 177 runs after three days of the second cricket Test in Perth. Australia were all out for 190 in reply to England's 308, and the tourists are 58 without loss in their second innings.

Briefly

John Geddies, promotion director of the Financial Times, died suddenly on Friday evening. Obituary, Page 4.

Cost of a haircut will rise by at least 10 per cent today following a pay award.

International Whaling Commission meets in Tokyo tomorrow to set catch limits for sperm whales. In the north Pacific next year.

Police fired on villagers who tried to stop Vietnamese refugees coming ashore on Malaysia's east coast.

Weekly £50,000 Premium Bond winner lives in Herefordshire. No: 97N 000784.

New Irish talks on EMS today

UK AUTHORITIES will hold further talks today with their Irish counterparts to examine technical implications of Ireland's decision to join the European Monetary System.

Main issue is whether the UK Treasury will have to impose exchange controls on transactions with Ireland, ending effective identity between the two currencies. Back Page

TWO disputing sides in the West German steel industry moved closer to a compromise at the weekend, but without a firm sign that the strike would end by Christmas.

SIXTH ROUND of off-shore licensing will test the Government's readiness to encourage smaller, British oil companies to develop greater expertise in offshore exploration. Licences are unlikely to be granted before Easter. Back Page

BRITISH workers from shop-floor to boardroom are being forced to "fiddle" the tax system because it has become so unjust, a leading article in today's Director claims. The best approach is for the Government to change the system, it adds. Page 4

CONSUMER spending could be lower than expected this Christmas, the FT survey of consumer confidence claims. Page 4

MARINE insurers face a record loss if the cargo ship München has in fact sunk in Atlantic storms. Cargo and hull together are valued at £20-£40m. Back Page

MONEY supply growth in the wider definition (Sterling M3) could be boosted in the next few months, as a result of unwinding of distortions in the recent figures, stockbrokers W. Greenwell say. Page 4

CONTINUING high sales of induction-proof instruments for pensioners helped raise National Savings Department funds under management by £98.2m to a record £10.96bn last month.

BREWERS will seek an average 5p on a pint of beer early in the New Year, when the voluntary price freeze agreed with the Government ends. Back Page

"FAIR WAGES" award by the Central Arbitration Committee will give 6,000 Boots workers about 16 per cent. The award is expected to cost the company £2.5m in a full year. Page 4

MOBIL CHEMICAL Europe part of the U.S.-based Mobil oil group, is to build a 25,000-ton-a-year polypropylene film plant in Belgium. The plant is due to come on stream in mid-1980. Back Page

BORG-WARNER Corporation's UK plants are to undertake further development, and probable manufacture, of the automatic transmission system originating with Van Doorne Transmissie. Page 4

WORLDWIDE SHIPPING of Hong Kong, has signed an order for four 84,000 dwt oil tankers worth about \$80m, with the Guyana shipyard of Poland, for delivery in 1980-81. Page 3

NORCROSS pre-tax profits rose 17.8 per cent to £6.53m for the half-year to September 30. Page 18

OPEC to charge 14.5% more for oil in four phases

By JAMES BUXTON in ABU DHABI

The Organisation of Petroleum Exporting Countries is to raise the price of its benchmark crude oil by 14.5 per cent in four phases during next year, starting with an increase on January 1 of 5 per cent. This is the outcome of a short and relatively uncontentious meeting of the cartel in Abu Dhabi.

The decision takes the price of Arabian light crude up from its present level of \$12.70 to \$14.54 by the fourth quarter of 1979.

After the initial 5 per cent increase the price will rise by 3.8 per cent on April 1; 2.3 per cent on July 1; and 2.69 per cent on October 1.

The average increase for the year is thus 10 per cent, the figure stressed by OPEC, and by Saudi Arabia and other moderate members of the organisation.

OPEC has agreed in principle to widen the spread between prices of the easily saleable light crude and the less-attractive heavier varieties.

The increase ends the price freeze in effect for the organisation as a whole since January 1977.

Stated officially to be "partial compensation" for loss of OPEC countries' purchasing power due to the decline of the dollar and "imported" inflation, the relatively large increase has been made possible by the tightness of the market.

Sheikh Yamani, the Saudi Arabian Oil Minister, said that he hoped increases in "small doses" would form the pattern for future price increases.

This avoided a large single increase, with its possible adverse effect on the Western industrial countries, and would reduce the seasonal fluctuation in demand for oil due to stocking ahead of expected price increases, he said.

In its communiqué OPEC said that should inflation and currency instability continue, it would "find it imperative to adjust fully for the effects" of the price rise for this year when OPEC Ministers next meet in June.

The Iron situation "made it very difficult for anyone to be for a small dose or small doses," he said.

One delegate to the conference said there was "a great deal of understanding" on the percentages which enabled an agreement on the price increases to be thrashed out in a few hours.

The gap between the moderates and the more radical members of the organisation—Iraq, Algeria and Libya—does not appear to have been very wide, all saying that they would not insist on compensation for anything like the full loss of purchasing power they believed they had suffered in the past two years.

Editorial comment, Page 10

OSCO, a consortium of 14 Western oil companies led by British Petroleum and working on behalf of the National Iranian Oil Company, has been implicitly accused of being an impediment to implementation of the Government's measures.

Elsewhere in the strikebound country a national strikers' co-ordination council is believed to be in process of being set up, bringing together representatives of public-sector strikers and dissident groups.

Most departments of the Government-owned Bank Mellie and the Central Bank of Iran are back at work after a fortnight's stoppage, but there are no indications of an end to other key public-sector strikes, such as in the Customs department or at power stations.

North Sea prices soar

By Kevin Done, Energy Correspondent

NORTH SEA crude oil spot prices have risen to unprecedented levels in recent weeks, but trading activity has been brought to a virtual standstill by the lack of available cargoes.

Spot sales of the lighter North Sea grades from fields such as Thistle, Beryl, Forties or Ekofisk, could now command prices as high as \$16.00-\$16.50 a barrel, oil traders said at the weekend.

Prices have risen sharply in response to the general shortage of light crudes and have already taken account of increases to be imposed by OPEC countries.

The market has moved quickly from surplus to scarcity because of a combination of unexpected factors. The turmoil in Iran has cut back production severely there and output has been fluctuating erratically.

Demand for some lighter products, especially petrol and naphtha, has been rising during the summer and autumn far more quickly than the oil industry had expected.

The market is also tighter as countries have increased stock levels both with the approach of winter and in expectation of OPEC producers raising prices.

Saudi Arabia's action to limit light crude sales to 65 per cent of total production has added to the upward movement of prices, and North Sea production has not yet reached the level forecast at the beginning of 1978.

Arabian light marker crude, which is the base for pricing other grades of crude oil, has been posted in recent days at prices as high as \$15 a barrel, compared with its official price before the OPEC meeting of \$12.70 a barrel. Little more than three months ago this crude was still selling at a small discount.

There is no fixed price level for North Sea crude, but in practice it appears that contract prices are related to the official price of Nigerian light with a weighting to take account of spot market prices.

It is thought that North Sea crude from a field such as Thistle was selling at about \$13.64-\$13.65 in June and July this year. Producers are understood to be asking \$16.00-\$16.50 for cargoes becoming available in the New Year.

Such price rises are far in excess of any OPEC increases. Traders were reported at the weekend to be ready to pay between 35 and 45 cents per barrel over and above OPEC increases for low sulphur light crudes.

China pledge on Taiwan 'key element'

By JUREK MARTIN, U.S. EDITOR

WASHINGTON—Assurances given by China on the future of Taiwan have emerged as the key element in inducing President Carter to proceed with establishing normal relations with the People's Republic.

Dr. James Schlesinger, the Energy Secretary, who took part in the negotiations, said in a television interview that the U.S. had concluded that China had neither the capability nor the inclination to invade Taiwan in the foreseeable future.

Defence Department officials had been pressing the same arguments. At the same time, while registering disapproval, China has agreed in effect to accept continued U.S. military sales of defensive weapons to Taiwan after the U.S.-Taiwan mutual defence treaty finishes at the end of next year. The U.S. considers that to have been a key concession from Peking.

As a result, President Carter was able to put into practice what Presidents Nixon and Ford would have liked to do: to recognise the People's Republic as the sole and legitimate Government of China.

Clearly, Mr. Carter had concluded that he was sufficiently secure to survive the inevitable criticisms from the American political Right, angry over what it considers desertion of Taiwan, and from the Soviet Union.

In his television address to the nation on Friday night, Mr. Carter had emphasised the bipartisan effort of the past seven years to restore diplomatic relations with China.

Over the weekend, former Presidents Ford and Nixon and former Secretary of State Henry Kissinger, endorsed the decision.

Mr. Carter will shortly send his Treasury and Commerce Secretaries to China for trade discussions.

John Hoffman writes from Peking: Mr. L. Woodcock, indicated yesterday that economic relations between the U.S. and China would substantially expand.

Among commercial possibilities observers here have pointed to the growing Chinese interest in computers.

China, which this year purchased 3.7m tonnes of its 10m tonnes of wheat imports from the U.S., will also be looking to the U.S. for agricultural equipment and technology.

Editorial comment and feature Page 10

China—UK trade. Back Page

Iran takes action over oilfield strike

By SIMON HENDERSON AND ANDREW WHITLEY

TEHRAN—Iran's military-led Government has taken action to enforce the tough measures decided on last week to break the country's crippling oil strike.

Over the weekend the military took over managerial authority for all oilfields from the National Iranian Oil Company and appointed Army generals to individual fields.

The initial shock of those measures, officially announced, that strikers or idlers will be dismissed and lost their company housing, appears to have had an immediate effect on production levels.

The output of the consortium's Khuzestan fields rose from a low point of 1.01m barrels a day at the end of last week to 2.14m barrels yesterday.

At least 10 strikers are believed to have been dismissed and 20 arrested.

The first of a planned series of military trials got under way in Ahwaz, Khuzestan's provincial capital. The main charges are to be of so-called "oral sabotage."

A general instruction to dismiss men not turning up for work has been issued to oilfield production managers.

Official suspicions over the attitude of the Western consortium, which was conducting the production of the bulk of Iran's oil, were reflected in a message from Gen. Azhari, the Prime Minister, to the provincial governor, a serving military officer, that "nothing less than full co-operation from OSICO" was expected.

OSCO, a consortium of 14 Western oil companies led by British Petroleum and working on behalf of the National Iranian Oil Company, has been implicitly accused of being an impediment to implementation of the Government's measures.

Elsewhere in the strikebound country a national strikers' co-ordination council is believed to be in process of being set up, bringing together representatives of public-sector strikers and dissident groups.

Most departments of the Government-owned Bank Mellie and the Central Bank of Iran are back at work after a fortnight's stoppage, but there are no indications of an end to other key public-sector strikes, such as in the Customs department or at power stations.

Oppose

It is also felt that the old "free China lobby" has lost its once vaunted steam and that although it may protest noisily (Senator Barry Goldwater has threatened to take Mr. Carter to court) it can be contained.

In particular it is believed that those in the Senate who oppose Mr. Carter over China were bound equally to oppose him over a Strategic Arms Limitation agreement with the Soviet Union.

Some people here remain nervous about the Soviet response. But the Administration appears convinced that President Brezhnev wants a second SALT treaty as much as

CBI optimistic on economy

By JOHN ELLIOTT, INDUSTRIAL EDITOR

ONE of the most optimistic forecasts produced recently about prospects for the economy is published this morning by the Confederation of British Industry, which says there is a widespread improvement in demand at home and overseas.

In the monthly report on its industrial trends survey covering 2,000 manufacturing companies, the confederation suggests that the high level of consumer spending is having an increasing impact on business activity and that export orders are also improving.

This puts its report out in front of other recent economic surveys, although the confederation does warn that not too much notice should be taken of one month's results.

The confederation is also worried about the prospects for company profitability, although these do not form part of the survey.

It intends to tell the Prime Minister at talks later this week, probably on Thursday, that the levels of profitability are so low that they should not be reduced further by stricter price controls. Some leaders of the confederation fear that the Government may be tempted by the TUC to strengthen price controls as a way of propping up the pay policy.

The main reason why the confederation's industrial report is bullish in tone is that the companies covered in the survey, which was conducted in the second half of last month, reported improved order books.

Total order books are still below normal for 29 per cent of the 2,000 companies involved. But the balance between those reporting below normal rather than above normal orders has

We take this opportunity to wish our many friends the compliments of the season and best wishes for 1979

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OVERSEAS NEWS

W. Germany nearer accord on steel rift

By Jonathan Carr  
BONN — The two disputing sides in the West German steel industry moved closer to a compromise this weekend — but there was still no firm sign whether the strike would end by Christmas.  
Hopes were raised on Saturday when trade union and employer representatives met with the political mediator. This was the first time that all three have sat down together since the strike began on November 28.  
An accord in principle was worked out which appeared to point the way to a breakthrough on the key disputed item: demands by the trade union, IG-Metall, for the progressive introduction of a 35-hour working week.  
But yesterday the union's main committee responsible for bargaining on wages and conditions said it could not accept the compromise, which involves more holiday and free shifts. This would have de facto implied a working week of less than 40 hours.  
However, the relatively moderate terms in which the union committee rejected the compromise suggested that further negotiation with the employers might yet bring agreement based on the "free shift" proposals.  
Neither side wishes to appear responsible for allowing the strike — the first in the West German steel industry for 50 years — to drag on into the Christmas period.  
Some 80,000 out of a total 200,000 steel workers in the North Rhine-Westphalia, Bremen and Osnabrück regions are affected by the strike and subsequent lockout action.  
Besides demanding moves towards the 35-hour week, IG-Metall originally sought a wages increase of 5 per cent for next year. The employers offered six weeks holiday and a 3 per cent increase.  
The wages component has hardly figured in the dispute and it is expected that both sides will settle for 4 per cent once the working time issue is resolved.

THE OPEC PRICE DECISION

U.S. fears inflation damage

BY DAVID BUCHAN

WASHINGTON — The decision by the Organisation of Petroleum Exporting Countries (OPEC) to raise the price of oil by 14.5 per cent will increase the cost to the U.S. of imported oil by 4.5 per cent. It will increase U.S. inflation rate by 0.5 per cent over the next year, while widening the U.S. trade deficit and threatening the dollar. These comments on the Abu Dhabi decision were made yesterday by Mr. James Schlesinger, the Energy Secretary in a television interview.  
The increase was "substantially larger than we had hoped," Mr. Schlesinger said. He still hoped that the oil exporting countries would review their decision to make successive price increases in the second, third and fourth quarters of 1979 in the light of the impact on the U.S. and its industrialised partners. But the first of the scheduled increases — 5 per cent on January 1 — is also the biggest in the series.  
The reaction of the stock and foreign exchange markets today will be anxiously awaited by the Carter Administration, which had earlier estimated that even for an OPEC price freeze, and a 5 per cent oil price rise would

widen the 1979 trade deficit by \$2bn. Mr. Schlesinger said yesterday that after somewhat lower U.S. oil imports this year because Alaskan production was beginning to flow, the volume of imports next year would rise again to near 1977 levels.  
The 14.5 per cent oil price rise next year will inevitably make much more difficult the Administration's task of curbing inflation. For one thing, it will make even more unpopular President Carter's intended move next year to lift the present controls on the price of petrol. Mr. Schlesinger said he expected petrol prices in a year's time to be five to six cents a gallon higher, about half of that the result of the OPEC decision and half the effect of decontrolling prices domestically.  
The Energy Secretary stressed that the Administration still believed decontrol was needed to encourage investment in new petrol refining, though the timing of the move depended on the Administration's anti-inflation programme.  
Mr. Carter had earlier called for an OPEC price freeze, and sent his Treasury Secretary, Mr.

Cleveland defaults but banks offer new talks

BY JUREK MARTIN, U.S. EDITOR

WASHINGTON — Mayor Dennis Kucinich of Cleveland, Ohio, has begun working on plans to lay off up to 5,000 city employees and drastically to curtail urban services after the default of his city on \$15.5m worth of debt at midnight on Friday.  
Last minute efforts to avert default, the first by a major U.S. city since the depression, failed because of total disagreement between the mayor and the city council over the sale of the municipally-owned electric plant, which Mr. Kucinich refuses to dispose of. The mayor was also rebuffed in an appeal for assistance from

Moroccans deny arms drop off Algerian coast

BY OUR OWN CORRESPONDENT

RABAT — Morocco categorically denied yesterday that a Moroccan transport plane had dropped 300 automatic weapons and ammunition a mile off the Algerian coast.  
In a communiqué last night Algeria claimed the arms drop, from a Hercules troop transport, was made at night eight days ago off Cape Sigil, 100 miles east of Algiers and near the Kabylia mountain area which is known as a centre for armed resistance to the regime.  
The Moroccan Government said the Algerian allegation was designed to divert the attention of Algerian opinion away from

Deadline passes for Mideast peace pact

By Roger Matthews

CAIRO — The target date for Egypt and Israel to sign a peace treaty passed yesterday with no indication that President Anwar Sadat is considering modifying the proposals that were formally rejected by the Cabinet in Jerusalem on Friday.  
President Jimmy Carter warned last week that failure to meet the December 17 date agreed at Camp David during the tripartite summit in September "would set a very serious precedent" and "would cast doubt upon the present treaty which is being negotiated."  
Following the failure of the mediating effort by Mr. Cyrus Vance, the U.S. Secretary of State, last week, Mr. Boutros Ghaly, Egypt's acting Foreign Minister, told a Parliamentary Committee on Saturday that Egypt would only sign the draft peace treaty if on the same day Israel signed an exchange of letters concerning the setting up of an autonomous Palestinian authority on the occupied West Bank and Gaza Strip.  
He said that Egypt would always be prepared to negotiate but only on the basis that a peace settlement had to be comprehensive and did not in any way prejudice his country's commitments to the Arab nation.  
Mr. Ghaly said Egypt was insisting on a four-point timetable for the West Bank and Gaza.  
● L. Daniel in Jerusalem adds: The treaty negotiations were not discussed at the meeting of the Israeli cabinet yesterday, even though the weekly session took place on the very date by which the Treaty should have been concluded.  
The Cabinet had its hands full today considering the draft budget for 1978-79 under the shadow of inflation which last month reached the equivalent of an annual rate of over 73 per cent.

THE U.S.-CHINA LINK

No immediate effect on Taiwan's security and prosperity

BY CHARLES SMITH

TOKYO — The U.S. decision to establish full diplomatic relations with China, announced somewhat earlier than had been expected, will have no immediate effect on the security or economic prosperity of Taiwan but could affect both in the long run. Elsewhere in the region, the move seems likely to have profound implications, particularly on Japan which recently signed its own "treaty of peace and friendship" with Peking, but which otherwise has a strong interest in maintaining the regional status quo.  
The Taiwanese President, Mr. Chiang Ching-kuo, reacted to the news that Washington would withdraw recognition of his regime's claim to be the legitimate government of China with a strongly worded broadside in which he accused the U.S. of "damaging the rights and interests of the people of Taiwan." President Chiang also said the U.S. move would produce a "tremendous adverse impact on the free world."  
Both statements, coupled with a repetition of Taiwan's promise to "liberate" mainland China appeared to be routine reactions to a development which must have been anticipated for several years by the Chinese nationalists even if the exact timing of yesterday's announcement came as a surprise. Taiwan apparently does not expect American derecognition (or the winding up of the U.S. Security agreement which will take effect within a year) to lead to any increase in tension with mainland China. The risk of rapid exodus of foreign capital is also being discounted — though it remains to be seen whether new capital inflow will be affected by the U.S. diplomatic withdrawal.  
Taiwan had diplomatic relations with 22 governments on the eve of President Carter's announcement and must now expect to see many of these follow the U.S. move towards Peking. Its declining diplomatic status need not necessarily mean that trade relations (which exist with over 140 countries) cease to be conducted smoothly and successfully.  
In the aftermath of American diplomatic withdrawal Taiwan seems likely to be the target of diplomatic or political overtures from Peking aimed at establishing "people-to-people" contacts in preparation for an eventual peaceful takeover from the mainland.  
Such overtures will presumably be rejected so long as President Chiang Ching-kuo remains in power. After the retirement or death of the 68-year-old President (the son of former Nationalist leader Chiang Kai-shek), changes in the relationship with the mainland might become a possibility.  
The only thing which would seem likely to upset this fairly uneventful scenario is the involvement of the Soviet Union in Taiwanese affairs, either through closer economic relations or through the provision of repair facilities for Soviet vessels. The Soviet Union would almost certainly be interested in acquiring such facilities, and might feel that now is the moment to press for them. Taiwan however would clearly be taking a major risk by yielding to Russian pressures.

CONTRACTS AND TENDERS

**NOTICE OF INTENT TO SOLICIT WORLDWIDE COMPETITIVE TENDERS**  
National Development Corporation  
Dar es Salaam Tanzania

**INTEGRATED PULP AND PAPER MILL MUFINDI, TANZANIA**  
Civil and Structural Work  
Installation of Mechanical and Electrical Equipment

The National Development Corporation (NDC), an enterprise organised and existing under the laws of Tanzania, will build an integrated pulp and paper mill near Mufindi, Tanzania. The mill will produce kraft and groundwood pulp from pine, wattle and eucalyptus for conversion to 60,000 metric tons per annum of industrial and cultural papers on two paper machines. The complex will also include chemical recovery, power generation, water supply, effluent treatment and the required site facilities. Start-up is projected to take place in 1982/1983. Project organisation has been established consisting of NDC, AB Statens Skogsindustrier as general advisers, Sandwell and Company as project managers and Jaakko Poyry Engineering Oy as engineering consultant.  
NDC has applied to the World Bank, Swedish International Development Authority, Kreditanstalt für Wiederaufbau, Kuwait Fund for Arab Economic Development, The Opec Special Fund, Commonwealth Development Corporation and The Nordic Investment Bank for financing. NDC will prequalify prospective Civil/Structural and Mechanical/Electrical contractors taking into account their proven ability to perform, their financial soundness and current experience in similar projects.

Contractors who wish to prequalify must provide details as follows:

1. Details of similar projects completed and under way in the last 10 years including description of work and value of contract.
2. Financial statement of last year and summary of last 5 years.
3. Detailed report on company structure and organisation.
4. Curriculum vitae of key personnel and personnel that may be assigned to the work giving education and employment experience.
5. Details of equipment fleet.

In case that a consortium of firms is formed to participate in the tendering each member firm of the consortium will have to submit detailed information as above. The capacity of a consortium will be judged basically on the history of the sponsor firm.

It is intended to invite international competitive tenders tentatively as follows:

- A. Civil/Structural construction as one single contract, encompassing the following works:  
Excavation, piling, reinforced and pre-cast concrete, erection of structural steel buildings, cladding, roads, services and finishing.
- B. Mechanical/Electrical work may be awarded as either one contract or as separate contracts and will tentatively include the installation of the following equipment to be purchased by NDC. Most of the work will be supervised by section specialists of the manufacturers:  
Paper machines, stock preparation plant, wet-lap machine, wood preparation plant, batch digesters, washing and screening and bleach plant, lime kiln, causticising plant, turbo-generator, water supply and effluent treatment, diesel generator, bleach chemical preparation plant, motors, process piping and fittings, pumps, machine tools, instrumentation, control panels and complete electrical installation from sub-station.

Only prequalified contractors or consortia will receive tender documents. Contractors with proven ability in the above are invited to submit their prequalifying documentation no later than 45 days from the date of publication of this notice. All communications to be in the English language in envelopes marked "Pulp and Paper Project" to National Development Corporation, P.O. Box 2669, Dar es Salaam, Tanzania.

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**PEOPLES DEMOCRATIC REPUBLIC OF YEMEN**  
PUBLIC CORPORATION FOR ELECTRIC POWER  
WADI HADRAMOUT ELECTRIFICATION SCHEME

The Public Corporation for Electric Power invites Tenders for the Works listed below. The project is being financed by loans from the Arab Fund for Economic and Social Development, the Islamic Bank and the World Bank.

**Diesel Generating Plant for Wadi Hadramout Power Station.**  
Specification 4126/01  
Tenders are invited for the complete turnkey supply, delivery, erection and commissioning of four 4 MW diesel generator units, operating at a speed of 500 rev./min. on heavy fuel, with their associated mechanical and electrical auxiliaries and an electric overhead crane together with power station building, administration block and workshops for a new Power Station to be built in the Wadi Hadramout.

**Overhead Line Materials and Underground Cables**  
Specification 4126/02  
Tenders are invited for the design, manufacture, testing and delivery CIF Mukalla port of 33 kV underground cable and overhead line, 11 kV underground cable and overhead line, 380 volt cable and 380/220 volt overhead line, supports and ancillary equipment.

**Metering Equipment**  
Specification 4126/04  
Tenders are invited for the design, manufacture, testing and delivery CIF Mukalla port of 7.500—20/80 amp single phase 220 volt, single rate meters; 75—50/100 amp, 3 phase, 380/220 volt, single rate meters; 500—50/100 amp, 3 phase, 380/220 volt, two rate meters; 500 time switches with 36 hours spring reserve, 220 volt.

**11/0.4 kV and 33/11 kV Transformers**  
Specification 4126/05  
Tenders are invited for the design, manufacture, testing and delivery CIF Mukalla port of the following:—  
375—25 kVA 11/0.4 kV pole mounted transformers.  
118—10 kVA 11/0.4 kV pole mounted transformers.  
32—100 kVA 11/0.4 kV pole mounted transformers.  
4—250 kVA 11/0.4 kV ground mounted transformers.  
2—500 kVA 11/0.4 kV ground mounted transformers.  
1—1000 kVA 11/0.4 kV ground mounted transformer.  
2—5 MVA 33/11 kV ground mounted transformers.  
Ancillary equipment.

**Switchgear**  
Specification 4126/06  
Tenders are invited for the design, manufacture, testing and delivery CIF Mukalla port of equipment for Al Qatn and Al Churaf 33/11 kV sub-stations comprising 33 kV outdoor equipment including isolators, fault throwing switches, neutral current transformers, insulators, etc., and 11 kV indoor metal clad switchgear with one incoming and four feeder panels at each sub-station.

**Mechanisation Equipment**  
Specification 4126/07  
Tenders are invited for the design, manufacture, testing and delivery CIF Mukalla port of articulated pole transporters, low loader transporters, light pole transporters, vehicle mounted diggers complete with pole lifting derricks, long wheelbase land rover type vehicles, mobile compressors and power rammers, tractors and lubrication equipment.

The Specification Documents may be obtained by application in writing to the Public Corporation for Electric Power, Hadjuf, Aden, PDRY, accompanied by a cheque for 40 Yemeni Dinars which is non-refundable. The fee is chargeable for each set of each Specification Documents. The documents will be available on or after 15th January 1979.

The Specification Documents may also be obtained from Preece, Cardew & Rider, Paston House, 165/167 Preston Road, Brighton BN1 6AF, the Consulting Engineer to the Public Corporation for Electric Power for this project. Applications to Preece, Cardew & Rider should be accompanied by a cheque for £30.

The tender closing date will be the 16th April 1979 in Aden. Fixed price contracts are required and tenders should be accompanied by a 5% Bid Bond valid for six months. Successful tenderers will be required to provide 10% Performance Bonds.

India to debate Gandhi penalty

By K. K. Sharma

NEW DELHI — The Indian Prime Minister, Mr. Morarji Desai will move, million today in the Lok Sabha (Lower House of Parliament) to imprison Mrs. Indira Gandhi until the end of the current session. But he also faces two separate threats from the former Prime Minister and his former Home Minister, Mr. Charan Singh.  
Mrs. Gandhi's Congress (I) Party prepared to launch a mass civil disobedience movement under which its members will seek to be arrested in sympathy with their leader. A call has gone out to Congress members all over the country to "fill the jails" and the party's leaders claim that at least 100,000 people have volunteered to go to prison.  
If the Congress members obey the call, Mr. Desai faces a major law and order threat since the volunteers will seek to be arrested by defying a ban on gatherings and demonstrations. Many have threatened to go on "hunger strike", a potent weapon in India. Mr. Desai feels that Mrs. Gandhi's support will come mainly from the southern states and that the response to the Congress call in the key Hindi-speaking belt in Northern India will be limited.  
Mr. Desai has given notice to the Speaker of his motion which seeks imprisonment of Mrs. Gandhi until the end of the current session and her expulsion from the House.  
The threat from Mr. Charan Singh amounts to a call for the winding-up of the ruling Janata Party and its replacement by individual and separate parties.

A welcome from Japan

BY OUR OWN CORRESPONDENT

TOKYO — Japan officially welcomed the announcement of normalised Sino-U.S. relations in statements by Prime Minister Masatoshi Ohira and Foreign Minister Sunao Sonoda. Mr. Sonoda also revealed that Tokyo was one of the few capitals to get advance notice of the American decision.  
The move means that the Tokyo-Peking "entente" which came into existence with the signing last summer of the Sino-Japanese Peace and Friendship treaty, is now balanced by what seemed likely to be almost equally warm relations between Washington and Peking. This is reassuring in the sense that Washington and Tokyo now see eye to eye in their relations with Peking, but potentially destabilising so far as relations with Moscow are concerned.  
A preliminary assessment in Tokyo is that the Soviet Union will feel the need to step up its armed presence in Far Eastern waters. A reference by the Moscow newspaper Red Star to the emergence of a "Far Eastern NATO" including Japan, China and the U.S. was highlighted as a last night's national TV news.  
A bonus for Japan from the U.S.-China normalisation could be further de-escalation of the Korean situation, to the status of a regional conflict now that one of North Korea's two principal backers will presumably be anxious to keep things quiet. On the other hand, observers in Tokyo expect that the establishment of full relations between Washington and Peking will mean a greater readiness by China to take a strong line with Vietnam, and some prospects that such a line will receive American support.

Pact feared by Moscow

BY OUR FOREIGN STAFF

THE Soviet Union has reported without comment the U.S. decision to establish diplomatic links with China but it is clear that Moscow is strongly opposed to the move.  
A terse 60-word statement by Tass, the official news agency, said merely that Washington and Peking had agreed to establish diplomatic relations. A more likely pointer to Moscow's feelings, however, was contained in a report in the Soviet defence daily Red Star, which spoke against the formation of a possible military and economic pact between Japan, China and the U.S.  
Although the commentary made no reference to the U.S.-

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مكاتب الأعمال



## Worldwide orders four tankers from Poland

By IAN HARGREAVES, SHIPPING CORRESPONDENT

WORLDWIDE SHIPPING, the group headed by Sir Yue Kong Pao, of Hong Kong, has signed an order for four 84,000 dwt oil tankers, worth around \$80m, with a Polish shipyard.

The vessels will be built by the Gdynia yard for delivery in 1980-81, and will be paid for in cash rather than with the aid of the usual shipyard credit.

The order is interesting, not only because of the general dearth of tanker contracts this year but because it shows that

Worldwide, the largest independent shipping group in the world, shares the view that there will be a recovery in the market for this class of tanker by 1981.

Mr. Ravi Tikoo, owner of the Globtek group, ordered two similar vessels in Japan earlier in the year.

Like Mr. Tikoo's ships, Worldwide's will be equipped to meet all the latest international safety standards in force or in the process of enactment.

Worldwide said that a charter for the ships was in prospect, although it would probably not be signed until the middle of next year. There was no question of the ships being built speculatively.

Worldwide, along with the other major Hong Kong shipping groups, has been expanding rapidly this year, with around 1m dwt of purchases in the second-hand market and new buildings totalling 0.75m dwt.

## GEC work in Iran suspended

By Patrick Cockburn

GEC HAS suspended work on the \$57m Ahwaz power station in Iran. The reason for the move is an accumulation of difficulties flowing from the strikes and go-slows which have been paralysing the Iranian economy.

GEC won the turnkey contract last year and it was scheduled for completion by next year. Early in November the company's main Iranian sub-contractor suspended work on site. There are also worries about the security of staff, and the problem of equipment not getting through the Iranian ports which have been hit by customs' strikes.

The Ahwaz power station is GEC's only large contract in Iran and at the time of the suspension there were 25 British staff on site. It is uncertain when work can be resumed.

Many international companies operating in Iran are now feeling the impact of the political and economic crisis. Strikes and go-slows in Government Ministries and most of the major banks have made day-to-day financial administration impossible—though this played little role in GEC's decision to suspend.

The anti-corruption drive and the rapid changes of Government have allowed many officials to avoid taking definite decisions on projects while the crisis lasts.

## SOVIET AEROSPACE

# Americans ready to fly Russian

By ANTHONY ROBINSON

ALTHOUGH the Soviet aerospace industry, like its American counterpart, has been in a position to benefit from the technological spin-off generated by a major research and development effort in the military and space fields, its efforts to break into the U.S.-dominated civil aviation market in the hard currency area have proved disappointing.

Somewhat ironically, however, it now appears that the Soviet aircraft industry is close to a potentially significant breakthrough into the U.S. and world market with a small but sturdy, three engine, short haul jet, the Yak-40, whose production is about to be terminated in the Soviet Union itself.

### Target

It was introduced ten years ago and the planned production target of 1,000 aircraft in several versions has now been fulfilled. An additional 50 aircraft are now being built at the Yak plant at Saratov, south east of Moscow, but when they are finished the plant will change over to production of a new, and significantly larger derivative, the Yak-42.

The Yak-40 was developed to satisfy the Soviet need for a rugged short-range jet feeder aircraft capable of flying in tough climatic conditions out of short, rough airfields without ground support facilities. With three engines at the tail, the aircraft carries from 27 to 32 passengers or 11 in the executive version. It has a cruising speed of 550 kph per hour, a maximum range of 1,350 kms and its 2,750 kg payload and has attracted considerable attention overseas.

It is one of the few Soviet air-

craft which has been sold, albeit in small numbers, outside Comecon. Apart from Bulgaria, Czechoslovakia, Hungary and Poland Yak-40's have been sold to Afghanistan, Syria, Vietnam, Angola, Zambia, as well as to Yugoslavia, Italy, West Germany and Canada.

But sales to the West have been symbolic rather than substantial. Avia Ligure, a small feeder line in Italy, for example, purchased three as part of a complicated barter arrangement some five years ago while Canadian buyers also took three of the aircraft following a major sales push and demonstration in Canada two years ago. A major sales breakthrough, however, failed to materialise. Soviet inability to guarantee adequate servicing and spare parts back-up, always a major Soviet weakness, was a major factor.

North American Rockwell was one of several western companies which showed an interest in the Yak-40 in the early 1970's and commissioned a market survey which showed that U.S. feeder line operators were not yet prepared to invest in jet feeder aircraft.

This autumn, however, President Carter signed the Airlines Deregulation Bill which includes a \$100m loan guarantee section solely for the purchase of aircraft by local feeder or short haul airlines.

The aim of the Bill is to encourage U.S. airlines to improve their service to medium-density population areas, and this is precisely the kind of market which the Yak-40 is designed to fill. This market also attracted the attention of a Washington consultancy, ICX-Avionics and its president, Mr.

Dade P. Lewis. ICX made its own estimate of the potential market for feeder jets over the next decade and purchased the results of Rockwell's market research. In 1976 Mr. Lewis started negotiating with Aviaexport, Licensintorg and other Soviet trade bodies to purchase or manufacture the Yak-40.

The Russians turned down the original proposal for a licensing agreement to permit manufacture in the U.S. but settled for a deal whereby they would supply the aircraft which would then be fitted with U.S. avionics and engines in the United States.

This fell through when it became clear it would require on-site inspection during the production process by inspectors of the Federal Aeronautics Administration. This the Russians refused. Negotiations then went back to the idea of building the aircraft in the U.S. using Soviet equipment from the Saratov plant which is due to be phased out next year.

### Potential

ICX-Avionics already has potential orders for 75 modified Yaks and projects a world-wide market of 1,555 aircraft over the next 20 years, of which 20 per cent would be in the U.S. This confidence springs partly from the relative cheapness of buying an existing aircraft and the fact that production of an entirely new aircraft of a similar type would require at least seven years. The modified Yak could be in the air within two years of signing agreement with the Soviets. The first test flight with U.S. engines is scheduled for mid-1979 and the first U.S.

assembled prototype by mid-1980.

The aircraft will be first assembled and then completely manufactured at a new plant to be built in the depressed steel town of Youngstown, Ohio. The plan is for tools, jigs, forgings and castings for the aircraft will be bought from the Soviet factory plus the landing gear.

But virtually everything which goes into the plane will be American. The Soviet engines will be replaced by three Garrett Air Research, TFE-731-3 engines which are "a perfect match in weight and dimension" but, significantly, deliver 20 per cent more thrust. The avionics, including the Sperry autopilot, will also be American. The modified version is expected to cost around \$3.8m, and with U.S. components world-wide servicing will be no problem.

If the ICX marketing forecasts prove accurate, the deal could provide the Soviet Union with a substantial hard currency income over the rest of this century. What is more the sight of Soviet-designed planes flying between provincial towns and rural airstrips to international airports throughout the U.S. and other western markets would be the sort of highly visible advertisement for Soviet technology which the Soviet Union is interested in.

Several key details still have to be negotiated however, including the size and nature of the licence and royalty payments. It has still not been decided whether to agree on a fixed sum licence fee or a royalty on sales. The next, and possibly final round of negotiations, takes place in Moscow next month but ICX is confident that a deal can be signed by the first quarter of 1979.

## Far East Conference rates rise

By OUR SHIPPING CORRESPONDENT

SHIPPING LINES in the Far East Freight Conference are to increase their rates by 8 per cent from March 1 next year. Unlike previous increases, however, this one will be staged in two tiers involving a 4 per cent general increase plus a flat \$3 per tonne or other volume unit. This is aimed at reducing the differential between rates paid on higher and lower value cargoes.

The conference has also made important changes in the way it calculates rate increases follow-

ing strong criticism from shippers about the past practice of relying mainly on data from individual shipping lines.

The conference is now employing a wide range of financial and economic information from the International Monetary Fund, the Organisation for Economic Cooperation and Development and governments of countries served by conference lines.

Concurrently with the rate increase, the conference is also to reduce its surcharge for goods

moved through the Suez Canal from 1.75 per cent to 0.4 per cent.

This follows a recalculation of the real extra costs faced by shipping lines using Suez, and will reduce the cost to customers of the new tariff package to 6.8 per cent.

Rates were last increased, by 12.5 per cent, in July, 1977, and the conference says it will hold the new rates until the end of February, 1980, so long as cost increases in the year before that date remain below 10 per cent.

## SHIPPING REPORT

# Uncertainty halves tanker rates

By OUR SHIPPING CORRESPONDENT

UNCERTAINTY in the tanker markets of seven days ago has turned into full-blooded collapse in the past week with rates for the biggest ships loading in the Gulf more than halved.

Anxiety about the political and industrial situation in Iran, coupled with worries about what the OPEC leaders would decide about oil prices, drove down rates to their lowest levels for some months.

Ten days ago a very large crude carrier was booked for a Gulf-West voyage at World-scale 664. On Friday, a similar ship was taken by Shell for WS291.

Other loading areas and smaller vessels have also been affected, with a 145,000dwt tanker taking WS50 (down 20 points) for two voyages Gulf-Japan and a 100,000-ton vessel accepting WS75 for a voyage West Africa-U.S.

Brokers are unwilling to predict whether rates will continue to weaken after Christmas, but

cargoes in most areas, the lean days which have characterised the last four years seem to have returned for a period.

Only in the Caribbean-U.S. market is there any note of optimism, with Calbraith Wrightson making a definite forecast of healthier rates in January.

Dry cargo markets were

seasonally quiet last week, but the collapse of oil freights will bring combination carriers rushing back into grain trading if owners decide it is worth cleaning their holds for the transfer.

On the sale and purchase side, inquiry remains strong for bulk-carriers and liner types, but there was little business concluded last week.

## Afghanistan sugar plant

By Chris Sherwell

ISLAMABAD — Freres-Cailles Babcock, the French engineering company, is to supply machinery and expertise for a \$53m sugar beet processing plant in Afghanistan.

The deal, to be financed under a grant-in-aid from the Kuwait Government, is Afghanistan's first major industrial project involving a Western company since the Socialist Government of Mr. Nur Mohamed Taraki came to power in a bloody coup last April.

The plant will be established at Baghlan near Kunduz in the north of Afghanistan and will have an annual output of 37,000 tonnes.

Afghanistan already has one sugar plant, and needs one more for self-sufficiency, but the terms for this have still to be finalised.

Freres-Cailles Babcock won the latest contract in competition with a Polish company.

## Zambian copper backlog remains at high level

By MICHAEL HOLMAN

LUSAKA—Despite the reopening of Zambia's southern route through Rhodesia in early October, there remains an 80,000-tonne backlog.

Industry sources disclosed that 141,000 tonnes of copper is awaiting shipment. Of this 67,000 tonnes is in transit on the northern route to the Tanzanian port of Dar es Salaam, and the southern route via Rhodesia to the South African port of East London.

Nearly 49,000 tonnes is held at the mines of the State-owned Roan Consolidated Mines (RCM) and Nchanga Consolidated Copper Mines (NCCM), while a further 25,000 tonnes is at the

ports. Since the normal pipeline for the totals service 60,000 tonnes, the effective backlog is 50,000 tonnes. This is approximately the same amount held up before the border decision.

The reason, say shipping sources, is poor performance on the Tanzania-Zambia Railway (Tazara). One source said that only three of the lines 27 locomotives were in operation.

East London is expected to ship about 30,000 tonnes a month, but unless Tazara can handle at least as much, the backlog cannot be reduced.

## French motor manufacturers hold off foreign competitors

By TERRY DODSWORTH

PARIS — French motor manufacturers have successfully resisted the pressure from foreign car importers this year, lifting their share of a market which has gone up by almost 2 per cent.

This is the main conclusion of a somewhat bizarre year for the French industry, which started very flatly but has since taken off to bring registrations very close to the 2m mark.

Sales are expected to reach 1.84m units when the final returns are in for December, of which importers will have about 21.7 per cent against 22.2 per cent last year.

According to the latest figures from the importers' trade

organisation, however, import sales have begun to pick up again in the last few months, and could be rather higher next year.

In October they rose to 36,281 units against 35,411 in the same month last year, lifting their market penetration from 20.5 per cent to 20.8 per cent. This trend is expected to continue next year, when the French manufacturers aim to make a big push overseas at the expense, to some extent, of their home market.

The most popular imports on the French market come from Germany, with Ford, Volkswagen and General Motors all doing well, even though Ford sales have declined a little this year.

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## UK NEWS

## Fewer jobs for Yorkshire workers

BY RHYD DAVID

**JOBS** are still being lost faster than they are being created in special areas designated by West Yorkshire for concentration of development resources, according to a county study of economic trends.

The county's economic priority areas, as they are known, were selected for special aid in 1977 because of high unemployment, job loss, emigration, lack of job choice, and industrial obsolescence, and have been formally included within the county structure plan so that they can be the focus of government initiatives.

Over a three-year period the areas, which include a number of towns formerly heavily dependent on wool textiles, saw a total of 390 positive developments involving investment and employment creation and resulting in the prospect of 13,800 jobs. There were also 188 negative developments recorded, however, resulting in the loss of 16,600 jobs—a net loss of 4,800 jobs.

The report, the first of a new series of quarterly surveys of economic progress within the county, highlights Bradford as now one of the parts of the county worst affected by job losses with a net loss of 3,000 in the period covered—almost 80 per cent of them in the inner city. The city has been affected by losses in textiles and by closures in more recently established industries including Thorn Consumer Electronics and Lucas Aerospace.

## Regeneration

Kirkstall, the borough covering Huddersfield, lost 1,900 jobs again, mainly in the inner city, but in Leeds there was a strong contrast between losses of more than 2,000 in the inner city and gains on the outskirts. There were also substantial net gains in Wakefield, where new industrial estates have been developed close to the M1 and M62 interchange and in Calderdale, where the area includes Halifax.

The county authorities are hoping to stimulate further development in the area with a £20m spending programme over the next 10 years. Industrial improvement areas have also been established in inner Bradford and Dewsbury and further schemes of this kind are being looked at.

A scheme for textile area regeneration has also been submitted to the European Commission which could form the basis for similar action in other textile areas throughout the Community.

## Rise in output of man-made fibres expected

By Rhys David, Northern Correspondent

**OUTPUT** BY Britain's man-made fibre industry for the whole of 1978 is now expected to be 8 or 9 per cent up on the previous year, following a continuing small improvement in demand in the third quarter.

The industry, seriously affected by the big increase in imports of textile and clothing products into Europe, produced 447,850 tons of fibre in the first nine months, 2.6 per cent more than in the same period last year.

The final quarter is expected to be better than the closing three months of last year, when there was a sudden collapse in demand. This is expected to help the industry towards a production total for the year as a whole of around 600,000 tons.

## OBITUARY

## John Geddes

**JOHN GEDDES**, Promotion Director of the Financial Times, died suddenly at the end of last week. This is an appreciation of him from one who worked with him throughout the time he had been with the Financial Times.

Before joining the company John Geddes had established a considerable reputation in the public relations field, principally by assisting Sir Leon Bagrit in explaining to the British business community what was then called automation, but is now more widely seen as the first part of the computer revolution. He was thus one of the best known and most successful practitioners of his profession when he became our public relations adviser. This, as we are principally a newspaper business, presented for him a problem as well as an advantage. For most journalists a public relations function is closely examined before it can be accepted as contributing to the general aim of providing better information for readers. As a newspaper it is its own best public testimonial, how could a public relations man improve on what the Financial Times could say for itself purely by doing a good job in its own columns?

We soon found that in John Geddes we had a person with whom we could all work. First of all he showed that his scrupulous concern not only for truth but for the whole truth was up to the highest standards of journalism. Second, his natural sensitivity enabled him, even though no longer a young man when he joined us, to learn in a very short time our corporate aspirations—always complex in a newspaper business—and come to share them. Yet he never failed to warn us when he thought our picture of ourselves was different to that held by others or in any respect a false one.

He was a real professional, unsparing of himself, and expecting the highest standards from those who worked for him. His ability led inevitably to his duties being extended to the supervision and control of all the companies promotional

activities, and of our conference department, where he was also a great success. He remained up to his death a fountain of new ideas large and small. Among his many achievements were his roles in the Financial Times Clipper race to Australia and back, and in the National Management Game. Much of his success was due to his character. He got on extremely well with those he worked with inside and outside the company, and with all kinds and conditions of people. He did not consider any simple task too trifling for him, nor any grandiose scheme involving the persuasion of business and political leaders too daunting. He liked all sorts of people and they liked him back.

His natural kindness, charity and enthusiasm gave a sense of reassurance to those about him. He gave an air of distinction to all he did. He concerned himself not only about the fortunes of the company, but of all those with whom he came into contact within it, and it is perhaps for this that he will be best remembered at the Financial Times. Despite indifferent health over a number of years he never complained, and bore great pain with great fortitude.

He made a unique contribution to the lives of those with whom he worked closely, and our lives will be made the poorer by his death.—A.V.H.

M.F.H. writes: On first meeting John Geddes, one was struck by the sheer size of him and everything about him. His ideas were big, too big, it was said by those who did not know him well. He would smile and with infinite attention to every detail, with firmness, with kindness, with the help of the wider circle of friends all over the world he would make it happen. And by chance you had to play some part in his scheme of things, he would make certain that, having done what you were supposed to do, you enjoyed every minute of it. He was a wonderful companion and a raconteur in the great tradition. He was a man who inspired complete trust and the greatest affection.

## 'Unwinding of distortions may boost money supply'

BY MICHAEL BLANDIN

**THE GROWTH** of the money supply on the wider definition (sterling M3) could be boosted in the next few months as a result of unwinding of distortions in the recent figures, it is argued by stockbrokers W. Greenwell.

Commenting on the November money stock figures in its latest bulletin, the firm says that it has received some official support for its view that the published sterling M3 figures have been distorted downwards.

The recent Bank of England Bulletin points out, he said, in discussing the six months to October, that for a number of reasons, "the figures understated the underlying rate of

monetary growth during this period."

The mid-November statistics showed a modest increase in sterling M3 of 0.2 per cent. Greenwell comments, that though the distortions in the figures have not yet been unwound, they are not becoming any worse.

In future, the firm expects some reversal. "For example, if, as with last year, the official seasonal adjustments in the main tax paying season do not fully allow for some taxes being met from holdings of certificates of tax deposit and other short-term instruments, some reversal of the downwards distortion to sterling M3 may be expected in the coming months."

## Able Civil Servants need promoting, says report

BY PAUL TAYLOR

**FEWER** graduates should be recruited for fast promotion within the Civil Service and existing staff should be given better promotion prospects, according to a Civil Service Department report published yesterday.

The report, prepared by an inter-departmental committee under the chairmanship of Mr. John Moore, a deputy secretary at the Civil Service Department, recommends a compromise between the continuation of a special recruitment policy aimed at attracting potential graduate "high fliers" and promoting civil servants from within the ranks.

Under the new scheme proposed by the committee the number of graduate entrants recruited into the special administrative trainee "fast stream" would be reduced while a new rapid promotion scheme for all executive officers, regardless of origins and educational qualifications would be introduced.

The committee was set up last year to review the workings of the administrative trainee scheme introduced in 1971. While the primary objective of the report appears to be to ensure a continuing supply of a restricted number of very able graduates to the Civil Service, it has also accepted the need to seek out and develop the talented staff already in the service.

## Severe pilot shortage 'may restrict travel'

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

**A SEVERE** world shortage of airline pilots is emerging as a result of the rapid recovery in the growth of air travel. It is expected to be especially acute in the UK, with more than 200 new pilots a year likely to be needed in the early 1980s.

The recovery in traffic has been particularly marked this year under the stimulus of cheaper fares in the U.S. and Western Europe and it is expected that, overall, this year's gain will be about 10 per cent, to about 660m passengers.

For the immediate future, the expansion is likely to be about 7 to 8 per cent a year, which is expected, together with the need to phase out older and noisy jets by the mid-1980s, to create a demand for more than 4,000 new airliners of all kinds, worth more than \$40bn over the next few years.

The effect of the growth on pilots will be equally dramatic. In the U.S. alone, the air transport industry is expected to hire at least 2,200 to 2,500 new pilots before the end of next year.

In the UK, the position has been made more acute by the fact that during the slack period of air transport growth in the early to mid-1970s few new pilots came forward and many were reaching retiring age.

Thus, the pilot force was run down. The UK airline pilots' force stands at more than 6,000,

of which more than half are employed by British Airways. Studies by the Air Transport and Travel Industry Training Board show that retirements will continue to deplete this figure at the rate of about 200 a year for the immediate future, with at least another 150 a year dropping out for medical and other reasons, a net outflow about 350 a year.

The train will be met partly by 130 to 150 pilots a year trained for British Airways, with about 35 to 50 coming from the RAF, and perhaps another 25 or so independently-trained pilots from private clubs.

## New airlines

Thus, the UK could be short of more than 140 pilots or so a year in the early 1980s and the number could rise according to the rate of traffic growth. Four new airlines have been formed in the UK in the last year—three passenger charter airlines by the Global, Horizon Midlands and Intasun tour groups, and one freight airline, Seimilair—all needing pilots.

Coupled with the demand emerging from the expanding airlines of the Third World, the overall demand for pilots could be so great as to be a restraining influence on the development of world air traffic.

This shortage will be even more acute if pilots' unions in some countries, such as France, continue to insist upon three-pilot crews on some new short-haul jets, instead of two-pilot crews.

Meeting this demand will create big problems for the limited number of available training establishments.

Even the RAF cannot be regarded as a big source of supply. It is suffering its own pilot shortage and is tending to retain its transport pilots for as long as it can.

The air transport industry regards the situation as serious and would like the Government to take steps to promote the training of airline pilots as a matter of urgency.

● Brymon Airways, the independent Plymouth-based airline, is buying a De Havilland Canada Dash Seven four-engine aircraft, costing about £2m. The 50-seat aircraft is due for delivery in the spring of 1980, and will be used on Brymon's flights to and from the Channel Islands, Gatwick and the Irish Sea routes from Plymouth.

This is the first UK order for the Dash Seven, described as one of the quietest airliners flying. The De Havilland Canada's total orders for the aircraft stand at 33, mainly from U.S. and Canadian airlines.

## Welsh breed tiger prawns in captivity

By Sara Davies

**SCIENTISTS** at the Fisheries Experimental Station at Conwy, Gwynedd, in North Wales, have shown that a new farming industry is possible in Britain—intensive prawn farming.

Using jumbo tiger prawns, which attain edible size in six months, in continuously recirculated sea-water tanks, the Ministry of Agriculture scientists have produced healthy baby prawns for the first time in captivity.

Adult prawns, feeding on pelleted food similar to that used to raise trout and salmon artificially, composed of fish meal, vegetable proteins and vitamin supplements, have successfully produced millions of baby prawns.

The experiment has been carried out in insulated fibreglass or wooden tanks, heated to tropical sea temperature of 28° degrees centigrade, using heat conservation techniques.

## Pollution

The Fisheries Station concentrated on ten species of tropical prawn and found that "Palaemon monodon", the Pacific tangerine prawn, was the most hardy of all types for reproducing in this controlled environment.

The recycling and purification of the sea water served to control pollution and the entry of disease.

Following the breakthrough in breeding techniques, the way was now open for commercial evaluation, said Mr. John Wickens, senior scientific officer in charge of crustacean culture at Conwy.

The operation of this type of fish farming would require a high level of capital investment. Mr. Wickens said, although the investment would produce a rapid cash flow in terms of high yields of what is a luxury product.

## Borg-Warner develops transmission system

BY HAZEL DUFFY, INDUSTRIAL CORRESPONDENT

**BORG-WARNER** Corporation's UK plants are to undertake further development, and probably manufacture, of a new automatic transmission system originating from the Dutch company, Van Doorne Transmissie.

Borg-Warner and Fiat have said that they propose to take a substantial stake in Van Doorne.

Development of the belt and pulleys part of the automatic transmission, which is designed for front-wheel-drive cars, will take place in Holland. But the main development work will be carried out at Borg-Warner's research centre in Letchworth, Hertfordshire.

It is expected that manufacture will be shared between Letchworth and Borg-Warner's other UK factory at Kenilworth, South Wales.

Mr. Peter Whybrow, managing director of the Letchworth division, said yesterday that manufacture and testing of the prototype would take 18 months to two years. The continuously-

variable transmission is expected to be on the market within four to five years.

Borg-Warner's investment in the joint venture with Fiat and the Dutch company will be between £2.5m and £5m, with each company taking a 24 per cent stake in Van Doorne Transmissie through a new stock issue.

Van Doorne will retain 394 per cent and the Dutch Government 121 per cent stake. Sale of the Van Doorne stock, which is still 75 per cent-owned by the Van Doorne family, is subject to the approval of the directors of all three companies.

Mr. Whybrow said that the "great interest" in Fiat, but it was thought that "it will also be sold elsewhere eventually."

Borg-Warner, which claims to be the largest manufacturer of automatic transmissions in the world, already sells to many car manufacturers from its UK plants, including B.L. Cars, Volvo, Chrysler, and Saab.

## Department stores show improved prospects

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

**THE HIGH** profit margins of Peter Robinson, the Burton Group women's retailing subsidiary, puts it ahead of the rest of the department stores field, according to a new survey.

The study by Jordans, which covers the financial performance of 120 department store companies, reveals that Peter Robinson has the highest profit margin, at 17.7 per cent, as well as achieving the highest return on tangible capital employed—77.9 per cent.

Only seven other companies covered in the survey had profit margins higher than 10 per cent. Among the smaller companies included in the survey, a department store in Leamington Spa, P. H. Woodward, emerges with the best record—showing a profit margin of about 20 per cent, in the last four reported years.

The survey also concludes that

department stores have proved remarkably resilient in the face of new pressures and competition from other retailers. It points out that Debenhams has opened new stores in four big towns this year while the Civil Service Stores has carried out a major structural face-lift.

The store's improved performance is said by Jordans to be due to such factors as the wide range of brands on offer, central buying, improved management, and substantial investment in improved facilities and credit sales.

Jordans says the improved prospects for UK department stores are in contrast to the situation facing most European ones. All of them are understood to have recorded losses in the past two years.

Department Stores, published by Jordans, Surrey, Brunelwick Place, London, N1, price £50.

## LABOUR

## Talks hope as strike by journalists enters third week

BY PHILIP BASSETT, LABOUR STAFF

**TALKS** are expected to resume this week between the National Union of Journalists and employers of 9,000 provincial journalists, whose strike over pay enters its third week today.

The strike seems set to continue into the New Year though, and in preparation for the holiday period the union today will start to pay out £36,000 from its hardship fund.

Since the effective ending of the Government's sanctions policy in the private sector, the Newspaper Society—the provincial newspaper employers—has firmly tabled an unconditional offer of about 8.9 per cent.

It has also offered to re-open negotiations with the pre-condition of a return to work in the provinces. The NUJ has rejected the pay offer and is unlikely to re-open formal talks on the basis of an end to the action.

The Newspaper Society today will receive an offer from the NUJ of informal working party talks on the dispute. The society's negotiators are expected to discuss the offer at a meeting today.

The union is likely to press for an offer of at least as much as the 14.18 per cent and 14.19 per cent which have been offered to weekly paper journalists in Scotland and Northern Ireland, respectively.

The Scottish offer would give the 250 journalists a rate of £72.50 a week, and Northern Irish offer £73.100 a week. The 8.9 per cent Newspaper Society offer would give a weekly rate of £65.

The NUJ seems likely to want possibly a higher overall offer in response to its £20 a week across-the-board claim, as the offers from the Scottish Newspaper Proprietors' Association and the Association of Northern Ireland Newspaper Proprietors only to weekly newspaper journalists.

The first payments from the hardship fund to be made today are based on the union's own fighting fund and on the £7,000 it has collected by voluntary levy in support of the strike.

The union will also hold a national rally on the strike in Nottingham on Wednesday.

## Arbitrators award 16% to Boots workers

BY OUR LABOUR STAFF

**SIX THOUSAND** employees of Boots, the chemist, are to receive increases of about 16 per cent after a "fair wages" award by the Central Arbitration Committee. It is expected to cost the company £2.5m in a full year.

The decision upholds a claim on behalf of warehouse and factory workers by the Union of Shop, Distributive and Allied Workers. Payments will be made in the first week of the new year.

It will give increases of £7.10 a week to the lowest-grade workers, rising to £15.50 a week to the highest grade.

The union said yesterday that the Boots workers were receiving, on average, about £10 a

week less than workers in other pharmaceuticals. The difference, stemming from "rigidities produced by successive Government pay policies" and a job re-evaluation scheme.

The company and the union have agreed a new scheme to bring the grading structure up to date from next month. The company co-operated with the union to provide information for the committee, which was asked to rule that the award was unfair under the terms of the Fair Wages Resolution, 1946.

The union will open talks on a new wage claim for the company's workers after considering the committee's award.

## Talks to start on BBC Christmas programmes

BY OUR LABOUR STAFF

**BBC** representatives will meet officials from the Association of Broadcasting Staff this week to try to prevent the loss of television and radio programmes over the Christmas period. Programmes are already being lost because of an Association ban on overtime.

Mr. Tony Hearn, general secretary, said yesterday that the union would be looking for its Phase Four settlement in the expected talks. The battle over pay seemed to have been won in the private sector with the abandonment of the sanctions policy, but the Government would not be likely to move so easily in the public sector.

The union has decided that its BBC members should not work more than 42 hours a week, nor more than 12 hours a day, nor accept any work attracting payments such as those for working through meal breaks, nor work with any member who refuses to follow these instructions.

The effect of the overtime

ban is that some Christmas programmes have already been abandoned, some produced at a standstill, and radio and television programmes have already been lost.

Yesterday, the corporation lost its early morning programme for Asia viewers and its Film of the Week of BBC2. A Radio Four programme, One Man, One Voice, was replaced with records.

Today, the current affairs programme Tonight is not expected to appear, and further cuts are expected tomorrow.

The dispute is being used by the BBC to highlight its long-standing grievance that the pay of many of its staff has been left behind that of independent television staff under incomes policy.

The corporation is transmitting messages on television screens and on radio before re-arranged programmes that the cause of the alteration to the schedules is Government pay policy.

## Hairdressers' 12.5% rise 'scandalously low'

BY OUR LABOUR STAFF

**PAY RISES** for 135,000 hairdressers, due to come into force today after a wages council settlement, have been attacked by the Independent Low Pay Unit as "scandalous."

The unit says in a report on the Hairdressing Undertakings Wages Council settlement that a 12.5 per cent pay rise for workers aged 22 and over could have been up to 60 per cent and still remained within the low pay provisions of the Government's guidelines.

The Stage Four settlement will increase minimum 40-hour week wages from £32.50 to £37 for an operative hairdresser

after two years' apprenticeship and two years in the industry, from £27.85 to £31.55 for the most easily comparable rate, workers aged 22 and over.

The unit says that this rate could have been increased, not by £3.50, but by anything up to £16.55. The new rates were "appalling low," and the attitude of the wages council "not just irresponsible, but scandalous."

The unit calls on the wages council to bring the higher rates fully up to the £45.50 low paid earnings level allowed for by the Government and to increase all other trained adult rates to at least £40 a week.

## Dock Board approves pay-offs on Mersey

**THE NATIONAL** Dock Labour Board has given the Liverpool board permission to offer voluntary redundancies to 650 registered dockers on the Mersey because of over-manning.

The Liverpool board originally applied for voluntary severance for 711 men in three stevedoring companies, but an adjustment has been made to increase the labour force in another company.

The Mersey Docks and Harbour Company, which employs two thirds of the labour force, is seeking about 500 redundancies.

Severance terms have yet to be worked out and no money will be made before the New Year, when efforts are expected to get the Government to foot at least part of the £5m bill for severance pay.

The reduction will bring the port labour force down to about 5,600 compared with 12,000 in 1948.

## FINANCIAL TIMES SURVEY OF CONSUMER CONFIDENCE

## Christmas goose not getting too fat

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

**CONSUMER** SPENDING this Christmas could be lower than expected, according to the Financial Times survey of consumer confidence published today.

Only a quarter of people interviewed for the survey said that they expected to buy more than last year. The other three-quarters expected to buy either the same or buy less. Of the total 44 per cent indicated that they expected to buy less.

The forecast of less consumer spending will surprise many in the retail trade who looked for substantial growth on last year's sales.

Over 55's and women from the ABC1 social classifications are likely to be the smallest spenders. Less than one in five plans to spend more. Men from the ABC1 appear prepared to spend more, as many saying they will as say they will buy less.

The reason for curtailed spending appears to be uncertainty about the economy and

politics early in the New Year. Although the December index of "future confidence" by consumers has stayed stable for three months, the six-monthly index continues to reflect the long-term decline over the half-year in consumers' optimism for the future.

The December index shows pessimism in a clear majority for the third successive month, 17 per cent expecting conditions to improve and 31 per cent to worsen, giving a negative index of minus 14 per cent.

This was the same as last month, and 1 per cent lower than October. The index, however, remains at its lowest level for two years.

The six-monthly index stands at minus 9 per cent, a fall of 1 per cent on November.

The main reason for pessimism remains rising prices, cited by almost a third of consumers. The numbers giving "the Government" as a factor doubled, from 8 to 16 per cent, though there was a sharp fall in the numbers blaming trade

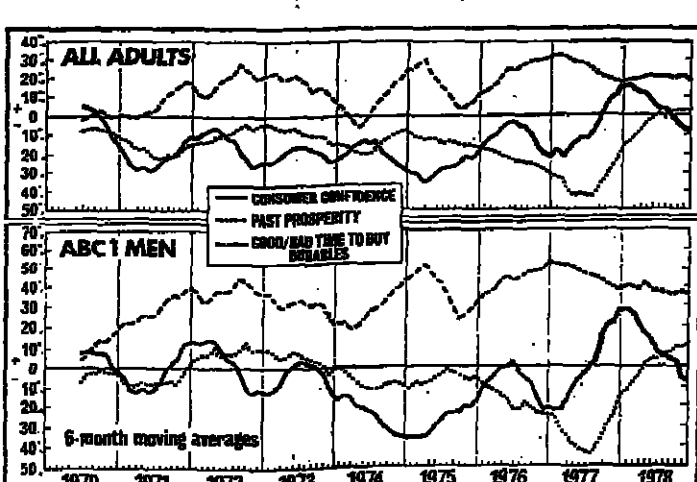
unions and strikers, from 33 per cent to 24 per cent.

For the optimists, the general feeling that "things must improve" was cited by 39 per cent, a rise of 3 per cent on November.

Analysis of the "future confidence" is closely related to pessimism about the more immediate Christmas spending. Women from ABC1 social classifications are by a wide margin the most pessimistic sub-group in the survey, while ABC1 men show more confidence.

Paradoxically, the index of past prosperity—how consumers feel compared with 12 months ago—has risen slightly this month. It shows 33 per cent of consumers feeling better-off than a year ago, compared with 30 per cent who feel worse-off.

This gives an index of 3 per cent, a rise of two points over last month, due to an overall increase in the proportion feeling better-off, as the same number as last month feel



worse-off than a year ago.

This month's index has only twice been exceeded in the nine years of the survey, in August and October this year.

Past prosperity has been at a high level throughout 1978, indicating a year when consumers felt they had made real progress in improving living

standards. They feel that there are too many unknown factors in the immediate future, mainly the prospects of a General Election and a rise in inflation, for the improvement to continue in 1979.

Again this is reflected in the "time-to-buy index," which has



# Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

## HANDLING Speeds travellers on their way

FRANCE is likely to be the first country in Europe to put into regular service the AMW or accelerated moving walkway, a device which has been in use since the late 1960s at the last century by H. G. Wells in "The Sleeper Awakes".

But whereas in that remarkable feat of prediction the rolling ways were built up in parallel strips, each consisting of one running slightly faster than its neighbour, the French TRAX system is so designed that the central portion of the single strip moves at a higher speed than its embarking and alighting sections.

This must sound impossible, at first reading, since one is talking about a continuous moving band carrying people who are standing on it throughout its length.

The secret is that the surface of the band is made up of a series of ridged plates, with interlocking ridges or teeth, that can move relative to each other somewhat after the fashion of a telescope. Underneath these plates, and supporting them, is a series of telescoping tubes in pairs, through each pair of which runs a closed chain running around four sprockets.

These four sprockets are at the apex of a quadrilateral which can be made to alter its shape to extend or retract the telescoping tubes on which the footplates of the walkway rest.

This will cause the plates to slide out or retract into each other which, in turn, will elongate or retract the moving band just as a worm stretches or contracts. The difference is, of course, that the walkway forms a continuous band.

There are a number of important consequences resulting from the application of this ingenious system. The major part of any such walkway can be made to travel at considerably higher speed than access and exit sections. In the first French prototype system to be set up in 1979 at the main station in Lyons, access and exit will take place at 3 km/h while the main body of the con-

## COMMUNICATIONS Design of a network

FACED WITH the problem of designing a network of communications, with switching and features to provide maximum utility at a minimum cost, the communications manager must resort to a detailed, and often time-consuming study.

Optimising the range of variables encountered makes this a delicate task of balance and compromise which can tax the ingenuity and resources of busy communications people. The amount of calculating and reworking necessary before an optimised scheme emerges can be considerable.

Recording, gathering and analysing the traffic data is also a complex task in itself.

A solution offered by Pactal is based on a software package "Tactis" which takes all the uncertainty from the task. Traffic records are taken manually at switchboards or by extension users or again by Pactal's "Tactis" call information logging equipment.

Tactis produces a series of reports which clearly indicate the configuration, type, size, and cost-effectiveness of a private network. It is suitable for situations where no private wires exist, where development or rationalisation of an existing network is required, or for keeping an already developed network in tune and closely matching business requirements.

Reports cover, half-hourly profiles of calls, equivalent STD call charges, busy hours, location, route and system, common route graphs, profile from multiple locations, network topology, switching centres, and economics.

From this, an optimum network can be designed and consultants are available to help interpret and act on the results if required.

Systems Development Centre, Pactal International, 33 Greycoat Street, London SW1P 2QF. 01-828 6374.

## ENERGY Solar power panel offer

POWER modules drawing electrical energy from sunlight for industrial, professional and domestic applications, and available at a price which is competitive with available imported products are on offer now from Ferranti.

The new MST300 design satisfies requirements for mechanical strength, reliability and long life under extremes of environmental and climatic conditions.

Standard equipment contains 36 silicon cells, each 3 ins in diameter, series-connected to give an output of 1.1 amps at 14.4 volts. It measures 560 mm x 480 mm and is only 130 mm deep. Aluminium construction offers good heat-sink capability and makes the unit suitable for use in high ambient temperature zones.

A recessed aluminium extrusion, into which the base plate and cover are fitted, assures a positive hermetic seal and prevents ingress of moisture into the resin filled space containing the silicon cells. Injection of this resin at the final assembly makes the unit suitable for removal from between the cover

## SEMINAR Offshore emergencies

A SEMINAR is to be organised by GPElliott Electronic Systems at Merton Technical College on March 14 and 15 next covering fire and gas detection and associated control systems for offshore platforms, terminals and refineries.

Aimed at designers, engineers and managers in the oil processing and contract industries, the seminar will cover general philosophy, detectors and area classification on the first day; the second will be taken up with foam, water and Halon systems, annunciation and display, and future trends including microprocessor based systems.

More from the company at 61, High Path, Merton, London SW19 (01-543 1241).

## EXHIBITION Accent is on testing

PROMISING TO be the largest specialist engineering show of its kind ever to be staged in Europe is the eighth Inspec at Birmingham's National Exhibition Centre April 24-26 next year.

This will be 15 times larger than the first Inspec which took place in London in 1965, with over 90 manufacturers, agents and service companies displaying products from many countries.

A record attendance of overseas buyers is anticipated next year when exhibitors will take up more than 20 per cent space of that utilised at the 1977 Inspec at the NEC.

## PRINTING Largest plates in Sweden

UP TO 5,000 paper-back books every hour are being produced in Sweden by Jannersten AB, Avesta, using an extremely large printing plate.

When the publishing company began to build its new two-cylinder, single-colour web printing press from scratch, using parts from every corner of Europe, it specified offset film and plates from 3M Sweden.

These offset plates are the largest in Sweden, if not the world, and are 10 feet long and 55 inches wide. Each 6,765 square inch plate can print about half of an average 150-page paperback book, delivering 5,000 copies on two tons of paper.

Before this "jumbo" version, 3M's largest plate, made at its Middletown, West Virginia, U.S. plant, measured about 90 inches long by 58 inches wide and was used for printing dress patterns.

3M UK, 380 Harrow Road, London W9 2HU (01-286 6044).

## DATA PROCESSING Univac pushes Varian

SINCE ACQUIRING Varian Data Machines in June, 1977, the Sperry Univac's minicomputer operations, based in Irvine, California, have undergone major changes in manufacturing facilities and capabilities.

Starting with 527 employees in development and manufacturing, manpower, the necessary R&D, with further expansion envisaged. Facilities have been upgraded with an infusion of more than \$5m in capital equipment, including some of the latest automatic and semi-automatic production and testing devices.

A recently installed flow solder machine increases the number of printed circuit boards which can be produced from 4,000 a month to 24,000 a month.

Development and manufacturing floor space has more than doubled, going from 150,000 square feet at acquisition to 315,000 square feet. This also is expected to increase as emphasis mounts on hardware and software design, research and development and product development. Almost \$9m will be spent in FY79 (ending March 31, 1979) for product development.

Following this remodelling and streamlining of production facilities, shipments, which were roughly \$3m a month at acquisition, are currently running at almost double that amount.

## Micro teaching kit

OBJECT of a kit from Intel, SDK-86, is to give engineers first hand experience of the hardware, architecture and machine code of the 8088 16-bit microprocessor.

A complete microcomputer on a single board in kit form, it contains the necessary ROMs to build a functional system in a few hours. A compact but powerful system monitor is supplied with general software facilities and system diagnostics in pre-programmed read only memories.

SDK-86 communicates with the outside world through either an on-board LED display/keyboard connection, the user's TTY or CRT terminal (jumper selectable), or in a special mode in which one of the company's intelligent development systems can transport finished programs to and from the board.

Memory is easily expanded simply by soldering in additional devices.

Only simple tools are needed for assembly and a manual is provided. Intel Corporation (U.K.), 4, Between Towns Road, Cowley, Oxford OX4 3NB (0885 771431).

## UK group in Sweden

AFTER A detailed study of the instrument needs of the Swedish electronic instrument market, Livingston Hire and Svea Data Communication and Computer AB have launched a joint company—Euro Electronic Rent AB—to be based in Stockholm.

Operational in January 1979, the company will initially meet the demands of the Swedish electronic instrument market and will later expand to cover the whole of Scandinavia.

By joining forces with Svea Data, Livingston Hire is able to combine considerable local market knowledge and technical back-up with availability of the largest European rental pool.

## Solicitors' accounts

AN AUTOMATIC accounting system for solicitors is being offered by Ovez Stationery.

As well as legal accounting and time-recording the system, called Ovez LX2500, handles payroll and cheque-writing automatically, as well as management reports, statistics and analyses. Over says the system can also be used to relieve the cashier of the traditional monthly workload.

The system is based on a microprocessor-controlled Log-Abax desktop minicomputer, programmed to the specifications of Ovez Stationery, which is part of The Solicitors' Law Stationery Society group.

## SECURITY Takes cash from point of sale

ACCORDING to DD Lamson considerable assurance against robbery from tills in shops and stores can be obtained with the application of the company's well-known pneumatic tube system.

The idea is to prevent the accumulation of large amounts of cash at each point of sale by running the pneumatic tubes direct from each cash register to a central strongroom or safe which can be sited well away from both customers and staff.

At the same time, each till carries a clear printed label stating that the system is in operation and that the tills contain only enough cash for change purposes. It is expected that criminals "casing" the premises will be deterred and abandon any attempt to rob.

DD Lamson believes that the use of their Secure Cash System will appeal to the insurance companies and might result in reduced premiums for retailers.

An advantage for the shop's accounting staff is that they can "cash up" throughout the day and avoid tackling the whole task at closing time.

The company is at Gosport, Hampshire PO12 8G (07017 67311).

## METALWORKING Stopping with precision

THE DIFFICULTY often encountered by machine tool designers of ensuring that an end stop switch always operates at the same place—many do not—is overcome by a unit introduced by Cole Equipment.

It makes use of a piezo ceramic disc which is incorporated into an oscillating circuit such that, as soon as an external force is applied to the disc the circuit is damped, oscillation stops and appropriate electronics circuits operate the switch.

An added advantage is that the "stop" data is not lost if the power supply is interrupted; as long as the force is present on the disc the oscillator cannot function.

Merchury Division, 3b, Church Road, Croydon, CR0 1SG (01-866 7851).

## INSTRUMENTS Radiation dose check

IN INSTALLATIONS where a sizeable number of personal radiation dosimeters are in use, the WDR-100 from Wallace will allow the accumulated dose to be read from the instruments at any time and records kept by means of a printer.

As each unit is plugged into the front of the microprocessor controlled equipment the user is automatically identified because his dose and his details are kept in the dosimeter's small solid state store.

The WDR-100's micro is programmed from the keyboard of the printer to identify the user's name, monitor number, alarm levels for three personnel groups, basic dose (year, life time), printing mode and regular report interval requirement. After reading, the printer gives all this data together with dose, an alarm if applicable, date and time.

Each monitor takes about two seconds to read and if required a digital display will show monitor number and dose.



## Entertain this Christmas— and be sure of a certain smile

It's the festive time of year, and there are clients to be dined, hard-worked staff to be wined, and friends to be entertained. Whatever the reason, here's a selection of particularly welcoming restaurants where the food and the atmosphere are sure to generate a warm glow—and a certain smile.

### The Wyvern, London

Recently opened at the Cumberland Hotel, Marble Arch, this prestigious new restaurant features authentic British dishes, many of which date back to original 18th century recipes—Salamagundy, Sirlon Steak with Wow Wow Sauce and Jugged Dorset Hare are just three delicious examples. Appropriately, the excellent wine list includes three English wines. The décor evokes a feeling of quiet, spacious English elegance, while the heraldic theme is captured by a handsome wyvern tapestry. Tel: 01-262 1234.

### The Hunting Lodge, London

Naturally enough, the elegant décor of this luxury restaurant invokes the opulent world of hunting, shooting and fishing. Certainly the spoils of such sports can be enjoyed to the full in such superbly traditional English dishes as ported duck, mixed game pâté, smoked salmon and jugged hare. The wine list merits special attention, reflecting as it does the contents of one of London's best-stocked cellars. 16 Lower Regent Street, SW1. Tel: 01-930 4222.

### The Black Swan Hotel, Helmsley, Yorkshire

Britain's greatest heritage of hospitality must lie in the many traditional THF inns and coaching houses, which welcome guests from Land's End to John O'Groats. The Black Swan at Helmsley in Yorkshire is a superb example, with its handsome diagonal half-timbered exterior. This 400-year-old hotel, part-Tudor, part-Georgian, part-modern, makes a marvellous place to celebrate Christmas, with a feast of superb steak, and wines to match. Bookings on (04392) 466.

### The Carvery

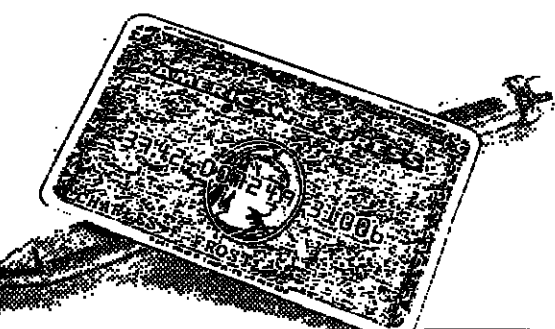
For a completely different gastronomic experience, how about carving your own traditional roast, from the best of British beef, tender lamb, or succulent pork, with a selection of vegetables, a choice of first courses and desserts—all for under £5 excluding drinks. Carveries like the one in the Albany Hotel, Birmingham 021-643 8171, can be found throughout Britain at selected

THF hotels. They're open for lunch and dinner, seven days a week.

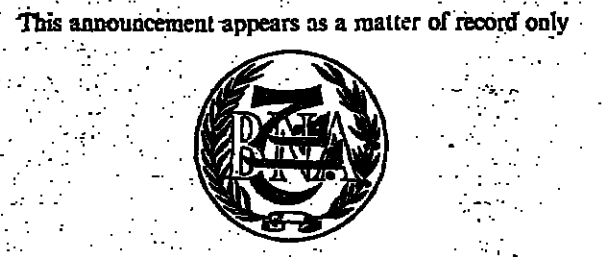
This is just a selection of many splendid and individualistic restaurants throughout Britain which share two important qualities—they're all backed by the name of Trust Houses Forte, and they all warmly welcome the American Express Card. With Trust Houses Forte and the American Express Card as your guides, you can cater for the inner man in any style you wish. THF offers the complete range, luxury restaurants, first-class restaurants, Carveries, handy coffee shops, and Buttries.

If you'd like to know exactly where all THF establishments are, ring 01-567 3444, or write for the Map Tariff to: Trust Houses Forte Hotels Ltd., P.O. Box 1, Altrincham, Cheshire WA14 5BJ.

If you're not yet enjoying the many international benefits of carrying the American Express Card, you can pick up an application form at any THF establishment, or call Brighton direct on 0273-693555.



Trust Houses Forte warmly welcome the American Express Card



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# Building and Civil Engineering

## £17m to Wimpey

THE COMPLETE on-site creation of pipework and ancillary facilities for the fluid catalytic cracking unit (FCC), at present under construction for Pembroke Cracking Company, at Pembroke, South Wales, comprises a contract in the region of £17m, awarded to George Wimpey M. E. and C. by Snamprogetti of Basingstoke, Hants.

Work is due to start immediately on the contract which is scheduled to take 18 months.

Pembroke Cracking is a partnership formed between Texaco and Gulf Oil (Great Britain), to construct, own and operate the unit.

The facilities, which will convert heavy fuel oil to gasoline and other refined products are scheduled for completion by September 1990.

Total development cost of the entire project is about £200m.

## Tarmac in the Gulf

G AND T Construction, the joint venture between Tarmac International and the Dubai-based Ghurair Group has won a £2.5m road contract in the Emirate of Abu Dhabi.

This brings the Ghurair-Tarmac Abu Dhabi order book total for the past three months to over £16m.

The 12-month contract covers widening, repair and resurfacing of 23 km (between the city of Al Ain and Al Yahar village) of the 160 km Al Ain to Abu Dhabi highway.

Following the line of the old caravan route, the present road is a two-lane dual carriageway. G and T will cold plane the existing asphalt surface, construct an additional lane on each carriageway, and resurface the 23 km length. Consulting engineers for the work are Freeman Fox International.

G and T has also been awarded two contracts in the Abu Dhabi fields. At Bu Hasa a 12-month job has begun to extend the residential accommodation where five single-story blocks will be erected to house 100 staff. The contract includes recreation and laundry facilities and the erection of squash courts.

Most of the structures will be

of reinforced concrete frame with concrete block infilling and external rendering.

At Asab in the same desert region south of Abu Dhabi city, G and T are well advanced with an operation to resurface and extend the airstrip. Over 5,000 tonnes of blacktop will have been transported 400 km from Tarmac's quarry at Manama in Sharjah when the job is completed.

Nine two-story blocks of bedroom accommodation are to be built on Das Island under a £2.6m contract awarded to G and T by Adma-Opeco. Its Sahid Camp on this island in the Gulf is to be extended to accommodate 190 European and Asian permanent staff.

Already well under way on Das Island is another Adma-Opeco contract worth £2m for an extension to another camp—that at Al Sharq where conventional temporary camp accommodation units are being supplied and erected on concrete base foundations.

Bechtel has also awarded Tarmac a contract for placing concrete foundation work. This latest award, worth £300,000, is for traditional beam and slab work in connection with a new liquid petroleum gas plant. Work will last three months.

## £6.4m block in Bahrain

WORK HAS begun in Bahrain on an 11-storey development for Cable and Wireless.

H. Webb (Construction) is undertaking the £6.4m contract which is due for completion by the end of November next year.

The building is to have piled foundations, reinforced concrete floors and stairs, block walls and bronze anodised aluminium windows, doors and screens. The architect is F. W. Hammond and Cost Partnership the quantity surveyors.

## Laing wins £9.6m

INCLUDED IN contracts worth over £9.6m awarded to John Laing is one for £7m for work at two air bases for the Property Services Agency of the DoE.

The biggest job worth over £6.6m, is to build aircraft shelters at the Aeroplane and Armament Experimental Establishment at Boscombe Down, Wiltshire.

Under the same contract, worth about £675,000, a further 105,000 sq ft of concrete taxiway is to be provided at RAF, Upper Heyford, Oxfordshire, where the company is already constructing 31 aircraft shelters under a £6m contract awarded earlier this year.

## £2½m mine job in SA

THE JOINT South African mining company Gold Fields Cementation Mining has won a contract worth about £2½m for coal mine shaft sinking at Malla in the Transvaal.

Two vertical 11-metre diameter shafts are to be sunk to respective depths of 115 and 99 metres. Provision of permanent concrete headgear is also included.

## Chatham store

A NEW branch of Bentalls department store is being prepared in High Street, Chatham, by Sir Robert McAlpine and Sons under the terms of a new £1m contract.

An existing three storey building is to have lifts, escalators, suspended ceilings and various services installed, with completion scheduled for the summer of next year.

## Factories in Yorks.

WORK HAS started on a nine-acre site at Mause Lane, Knaresborough, where three factories are to be built for the GSPK Group of Harrogate.

Construction work under the £1m contract is being carried out by Field Construction of Leeds and Harrogate, a member of the Robson Group.

All three factories will be on one level with a total floor area of 60,000 square feet. The first two will be completed by June next year, and the third a year later.

## Fairclough in North

CONTRACTS together worth £1.8m have been awarded to Fairclough Construction Group for building work in Lancashire and Cheshire.

Under a £1.1m contract for the DoE, the company will build a four-storey office block in Cheshire Drive at Kirkby, Merseyside, providing extra accommodation for the DSS.

In Blackpool, an extension is being built on the promenade at Louis Tussauds Waxworks to extend its permanent exhibition.

A £240,000 contract for Salford City Council is for 27 new homes in Ripby Street, Salford.

## Mowlem £3.2m housing

FOUR HOUSING contracts in new towns are worth together £3.2m to John Mowlem.

Largest project, for £1.2m, is at Milton Keynes for work on the Conisbrough 3C scheme for the Development Corporation.

Stevenson Development Corporation has awarded £1m for 80 homes to be built at Trumper Road, Pla Green.

A contract for £715,000 is for the erection of 54 maisonettes and flats at Mercey, Katherine Neighbourhood, for the Harlow Development Corporation.

Finally, at Redditch, the company is undertaking the construction of 22 homes at Beoley Road, in a £280,000 contract awarded by the District Council which is providing architectural and quantity surveying services.



Architect's drawing for the new Temple Island scheme, near Marlow, Bucks. Gough

Cooper plans to develop the 5.2 acre area as

a picturesque village with 70 four-bedroom leasehold villas, each having its own car parking and boat mooring. Construction work begins early next year.

## Highlands holiday centre Protection of piling

AN ALL-THE-YEAR-ROUND leisure centre is now nearing completion for the Automobile Association in the Scottish Highlands. It includes 50 lodges, a heated swimming pool, games and club rooms and a launderette, on a landscaped 28-acre site, at Carrbridge. A loch for recreational use, formed out of a peat bog, is another of the facilities created.

The centre, Lockanully Lodges, is expected to open early in the New Year. The lodge

buildings are two-bedroomed units, equipped with kitchenette, bathroom, living room, balcony and storage.

The project was designed by Shankland Cox Partnership, which is also responsible for the civil engineering works, with Allen Gordon and Co. of Inverness, engineering consultants, supervising the formation of the loch. Overall construction is being carried out by William Tawse, of Aberdeen, under a contract valued at about £1m.

## Irrigation in Saudi

AN IRRIGATION project costing £1m is being developed to produce alfalfa and forage crops in one of Saudi Arabia's most arid areas, south east of Riyadh.

Equipment for the project, including 17 automatic centre-pivot irrigation machines, is being manufactured and installed by

the Lindsay Manufacturing Company, a subsidiary of DeKalb AgResearch, based in Nebraska, US.

Technicians will erect the equipment and instruct local people over a 70 day period, and two technicians will monitor operation of the equipment for a year.

## Advance factories

THE English Industrial Estates Corporation has announced the start of work on nine advance factories on sites throughout the UK.

Seven factories are being built for the Department of Industry at Sutton Fields, Hull, under a contract worth about £980,000 to Stepien Contractors of Beverley, N. Humberside.

A contract worth about £91,000,

which includes site development works, has been awarded to Sellick Nicholls Williams (EEG) of St. Austell, for an advance factory for the Development Commission at Camelford, Cornwall.

The Development Commission at Carlton, Allendale, has awarded a contract for £87,900 to Michael Thompson of Carlisle for an advance factory which should be ready for occupation next May.

## Flooring at EMP's new HQ

A CONTRACT worth £370,000 for 17,000 sq metres of flooring for the new EMI administrative centre in Tottenham Court Road, London W1, has been awarded to H. H. Robertson (UK), by Boris the managing contractor.

The flooring will be made up from the company's Platform

CM30 which is a 600 mm square panel mounted on adjustable steel supports giving an under-floor clearance of 85 mm. The 30 mm thick panels are made from high density chipboard on galvanneal steel trays and are individually removable to give access to services.

## Airport work

ARCHITECTS and planning consultants Scott, Brownrigg and Turner is to assist Mansell Consultants in the design of passenger handling facilities at Basrah International Airport in Iraq.

This follows Scott, Brownrigg and Turner's appointment, to assist Mansell with preparation of tender documents for a major expansion of Basrah International Airport.

Youngman System Building has received orders totalling £29,882 from Kintyre Engineering Company. Main work is the building of a new two-storey office block to accommodate administrative personnel at Blackwell, Berkshire.

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## IN BRIEF

● The PVC division of British Industrial Plastics (Turner and Newall) has signed a continuation contract valued at £150,000 with Mitsui and Company Japan for the supply of "Extruder" pipe and fittings to be installed at Yanbu in Saudi Arabia.

The pipe will be used in water transmission and drainage lines on the industrial complex to be built at the western end of the Yanbu Jubail trans-Arabian pipeline.

● A development being undertaken by International Stores in conjunction with the London Borough of Bromley is a new 42,000 sq ft superstore, car park and 15,000 sq ft office development, at Homefield Rise, Orpington, adjacent to the Waltons Shopping Centre.

The cost of the project is £2.1m, and the main contract has been let to Marshall Klein.

● Two contracts won by Woods Construction are for 16 two-storey flats in Ringwood for the Gloucestershire Housing Association, at £224,724 and an addition to existing office premises for Collins and Hayes of Monks Road, Hastings (£134,146).

● T. E. Lesser (Scotland) is to design and build a new two-storey extension, together with conference area for the Peebles Hotel Hyatt. Work on the project, worth £300,000, started last month.

● A site at Gillingham in Kent is being developed by Wiltshire in association with Gillingham Borough Council and National Coal Board Pension Funds, to provide 38,000 square feet of small industrial units, designed to attract smaller users and companies about to commercialise industrial business.

● Redland Industrial Services (Arabia) has been awarded a £1.5m contract by the Arabian American Oil Company (ARAMCO) for hydro-cracking and steam cleaning gas/oil separation plants at its refinery at Ras Tanura.

● Youngman System Building has received orders totalling £29,882 from Kintyre Engineering Company. Main work is the building of a new two-storey office block to accommodate administrative personnel at Blackwell, Berkshire.

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# Why Westland still has to prove it can fly high

BY RICHARD LAMBERT

IN THE view of the City, a dark shadow hangs over the future of Westland Aircraft, Britain's only helicopter manufacturer. Its share price has fallen to a third of the high point touched ten years ago, thus valuing the group at just £20m—well under half its net asset value.

Profit figures for the year to September, due to be announced next month, could make a horrendous reading, and the dividend payment is in question. In the latest accounts, for 1976-77, published in January, Westland had said that the substantial provisions which it had made against losses on a Ministry of Defence contract for Lynx helicopters took into account likely levels of inflation over the next few years. Yet in June it revealed that an even larger provision against the same contract might be required in 1977-78.

Westland has also hit problems on its hovercraft business, where costs on a major contract to stretch two SR.N4 hovercraft have run far ahead of budget.

Two questions have been raised by these damaging setbacks, both of them mainly about the helicopter business which accounts for two-thirds of Westland's capital employed. The first is whether Westland's management can cope with the late changing from a Government contractor in the West Country into what is becoming a multi-product company selling in world markets.

The second is whether a company of its size and position in the helicopter marketplace can be a long term contender in a highly competitive international industry.

It was not until around 1970 that Westland moved into the export market in a big way with the Sea King, developed by Westland from the U.S. Sikorsky S-61 design. And only in 1973 came the decisive break with U.S. based designs when production started on the Lynx helicopter—conceived and designed by Westland itself.

To compete in the export market the group had to be prepared for the first time to build on a speculative basis, in order to reduce its lead times. It also had to vary its designs to suit individual customers, and to establish a whole raft of extra spares and services.

According to Mr. Basil

Blackwell, the chief executive: "The problems creep up on you until you realise that the management system you have had in the past does not necessarily cope with the new conditions."

Controlling as many as 60,000 separate works orders on mechanical recording systems posed formidable problems. Until about three years ago physical checks of work-in-progress, for accounting purposes, were almost unheard of at Westland. Mr. Blackwell concedes that control systems in the past were much laxer than they are now, and is confident that the position is well in hand. Orders, work in progress and other key inputs are currently moving onto a real time computer system.

But in the early 1970s, Westland certainly had trouble in controlling a backlog of spares for its customers, and profits were held back as a result. And just as it started to get on top of this problem, along came the Lynx.

## Awful

The terms of the initial Lynx contract with the Ministry of Defence were unique—and awful. A product of the Anglo-French accord of the late 1960s, the contract seems to have combined the worst of the French and British governments contracting arrangements. On what was a large contract, for 119 aircraft, 25 per cent of the total cost was on a fixed price basis.

Inevitably such terms brought difficulties just at a time when inflation was starting to take off. These became almost crippling when combined with the production difficulties which Westland faced with the new helicopter. Contrary to the company's previous experience, it was dealing with a new design, not one which had already been manufactured elsewhere.

One of the biggest problems with the new design was in fixing payment rates. For years, production workers at Westland's Yeovil factory had been paid on a piecework system. While this was practical when the group was manufacturing established products under licence, it proved impossible to

adapt it to a newly designed aircraft like the Lynx.

Even after three years of work on the Lynx, Westland had still only reached agreement on about half the necessary piecework times. In the first year it completed less than a third of its planned output on the 1973 contract, and in the third year it still was about two-thirds of its target.

This failure made it impossible to project the flow of the production line, and thus had serious consequences for the level of inventories. Between 1973 and 1977, gross work in progress rose from £56m to £148m—largely due to the Lynx contract. This also explains why Westland had this year to announce further big provisions against the contract only months after the big write down in its report and accounts. The group had got its sums right on completed work—but had anticipated a sharper fall in production times than it was actually able to achieve.

After a series of confrontations—culminating in the summer with dismissal warnings for the 2,000 production workers at Yeovil—the helicopter company has now moved from piecework to a system of measured day work, with performance related bonuses. The industrial relations wounds are still healing. Such a fundamental change in working practices has inevitably led to an initial drop in productivity, and will probably take a year or two to settle down. But at least the Lynx is coming off the production line at an acceptable rate.

Output since the spring has been running at five or six machines a month, almost twice what was achieved in the first months of this financial year. In the 12 months to next September, Westland hopes to produce about 80 Lynx, of which perhaps 50 or 60 will be for the 1973 contract and accounting for almost half of it. The group will not make any profit on those. But in a year's time, the 1973 contract should be just about completed, and meanwhile the rest of the helicopter business—including spares for the Lynx—is earning a reasonable return.

Meanwhile the balance sheet is looking much more healthy than it did a year ago. Thanks to the Lynx, helicopter sales doubled between 1972-73 and 1976-77, but the pre-interest return on capital fell to only 5.6 per cent. As a result, the group's borrowings soared from £7.3m to £36.7m (mostly short term) compared with shareholders' funds of £55.3m.

Since then, however, inventories have started to stabilise and a big drive has been mounted on debtors. In addition, Westland has received a down payment of £15m on a large Lynx contract for the Middle East.

## Business courses

**The Young Buyer, London.** February 12-16. Fee: £165 plus VAT. Details from PMC Executive Training and Development, 207 Victoria Street, London, SW1.

**Be A More Effective Executive, London.** February 12-13. Details from Eurotech Management Development Service, PO Box 23, Camberley, Surrey.

**8th International Company Lawyers Conference, Montreux, Switzerland.** February 21-23. Fee: BFR 30,400 (non-members), BFR 27,400 (AMA/1 Members). Details from The Registrar, Management Centre Europe, avenue des Arts 4, B-1040 Brussels, Belgium.

**Designing Systems with the 9900 Microprocessor.** February 12-23. Fee: £500. Details from the Course Registrar, Bleasdale Computer System, 7, Church Path, Merton Park, London, SW19.

**The Art of Data-Processing within Materials Management.** Leamington Spa, February 13. Fee: £80 plus VAT. Details from Purchasing Economics, Pel House, 35 Station Square, Potts Wood, Kent.

**International Marketing Seminar, Geneva, Switzerland.** February 18-March 2. Fee: SFR 5,000. Details from The Admissions Secretary, Centre d'Etudes Industrielles, 4 chemin de Conches, CH-1231 Conches, Geneva, Switzerland.

**Current Practices in the Eurobond Market, London.** February 5-6. Fee: £600. Details from AMR International, 6-10 Frederick Close, Stanhope Place, London, W2.

**Establishing, Operating, Managing Captive Insurance Companies, Amsterdam.** January 23-25. Details from Risk Research Group, Bridge House, 181 Queen Victoria Street, London, EC4.

With the 1973 contract out of the way, the immediate outlook will depend on further orders for the Lynx. Westland is confident about the workload through to the end of 1982, and the Lynx seems to have established itself as a leader in the world market for naval helicopters. What has to be seen now is whether the Lynx can crack the market for army helicopters in a big way.

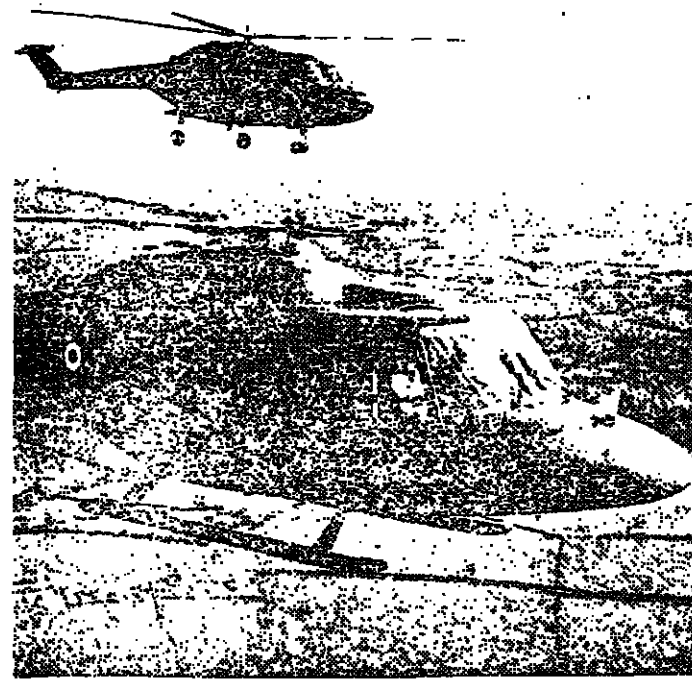
## Generate

Thereafter, the next big step will be the introduction of the Sea King replacement—the WG-44—on which it is hoped to start production somewhere around the mid-1980s. If all goes to plan, development work on the project will generate substantial turnover during the next few years, on a fully funded, cost-plus basis for the Ministry of Defence.

Will it lead to Lynx-type problems? Westland stresses that "the terms of the 1973 contract were not what we would normally expect," and underlines the importance of its new working practices. In addition, the group says that it has learnt important lessons from its first venture into international collaboration.

The key, according to Mr. Blackwell, is "to take decisions according to who can make the particular product most efficiently—not on the basis of Buggin's turn."

The project is going ahead in collaboration with the Italian company, Agusta, and the hope is that some French and German involvement will be



The Westland/Aérospatiale Lynx helicopter—a product of the Anglo-French accord of the late 1960s.

secured at a later stage.

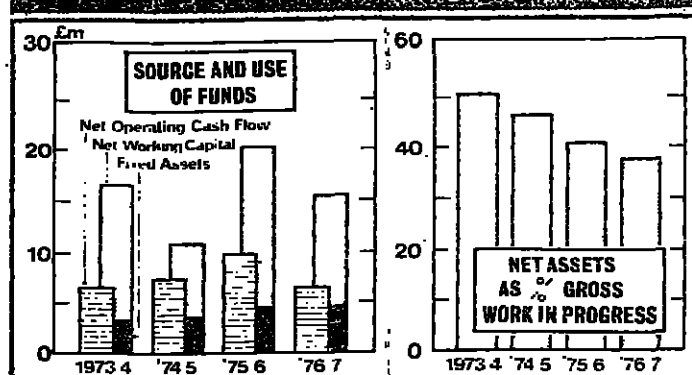
As soon as the military helicopter programme is launched, the intention is to get started on a civil version, which would be a large, 30-seat aircraft. The idea is to produce this helicopter in partnership with the French and it could cost as much as £20m or £40m to develop—a sum that Westland seems confident of securing provided that the product is right.

Westland badly needs to make its mark in the market for civil helicopters, which by 1980 will probably be at least as big as the military market. So far, its record is one of missed opportunities. It failed to exploit its initial success in

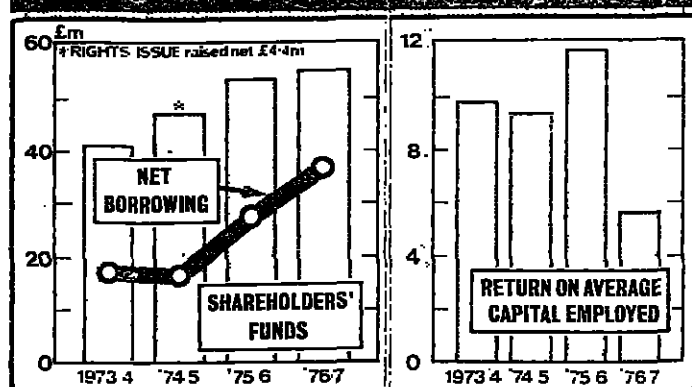
selling Wessex machines, to Eristow in the 1960s, because it did not recognise the potential market for helicopters in offshore services. In the early 1970s, it proposed a civil version of the Sea King—provided that British Airways and Bristow ordered three apiece. They did not—and there are now about 50 Sikorsky S-61s (from which the Sea King is derived) operating in the North Sea.

Westland claims that its size is not a constraint in its long-term plans for civil aircraft. It recognises that Aérospatiale, the nationalised French manufacturer, has needed lots of financial muscle to break into the key U.S. market for civil helicopters (Aérospatiale claims

## WESTLAND AIRCRAFT



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The bondholders of the international floating rate loan 1978-1983 issued by the GROUPEMENT DE L'INDUSTRIE SIDERURGIQUE G.I.S. are convened to an Ordinary General Meeting to be held at 5 bis, rue de Madrid, Paris (France) on January 5, 1979 at 3 p.m. in order to consider the following agenda:

- Appointment of the bondholders' permanent representatives, designation of the substitute representatives.
- Determination of the bondholders' representatives' capacities and of the indemnities given to the permanent representatives.

To permit the bondholders to attend or to be represented at this meeting, the bonds or their deposit receipts, must be deposited at least five days before the date fixed for the meeting, at the offices of the banks having participated in the placing of these bonds and from whom proxies or admission cards can be requested. This meeting shall be validly held if the holders of twenty five per cent of the outstanding bonds are present in person or represented.

The Board of Directors







## THE ARTS

هكذا من الأهل

Covent Garden

## Die Fledermaus

by MAX LOPPERT



Ryszard Karczykowski and Barbara Daniels

Leonard Burt

In most, if not all, of the essential matters, the Royal Opera has got *Die Fledermaus* wrong. Friday's performance, first of the current festive season revival, was not without its passing pleasures—indeed, as a treat for the whole family for which purpose the whole multinational, multilingual enterprise was presumably dreamed up in the first place, it slips down without strain. (And so, at those seat prices, it ought to.) But in place of an opera known and loved as one of the key works of the genre, the evening affords an only mildly diverting entertainment, often rather square-toed and heavy in gait. That can't be right, surely.

It is in the second act, most of all, that the evening seems heaviest. Without issuing an encyclical on the absolute virtues of purism in Johann Strauss, it may nevertheless be both practical and pertinent to stress that it is at this point in the operetta that the version devised by Gerhard Börsner, producer Leopold Lindtberg, and conductor Zubin Mehta departs most significantly from the original. If ever the importance—no, let me put it more strongly, the cardinal necessity, of having Orlofsky played by a mezzo-soprano—ever needed demonstration, this production provides it, by default. For the moment, the genial middle-aged figure of Robert Tear appears—and despite (or perhaps because of) all his visible effort in making a go of the part—the atmosphere of gaiety and pleasure, of an uncertain moral tone, that is summed up in the priceling of high style and ambiguous gender ebbs away.

This is the most pernicious alteration of the evening. Not that the others are not serious, and they include the assignment of a baritone to Eisenstein's part (damaging in terms of vocal colour), the additions and subtractions practised on the various numbers, and the invention of new polyglot dialogue, more often than not limp and predictable in its humour. (That

wretched misappropriation of a line of noble dialogue from *Fidelio* has now passed into the mouth of Alfred). The sum of all these parts, in Julia Trevelyan Oman's impeccably researched but undramatic scenery, is a ball that is as much fun as a civic function in Huddersfield Town Hall. When Mehta Park and the unfortunately garbed Wayne Eagling come on to give us Ashton's exquisite choreography to the *Voices of Spring* Waltz, which replaces the full-length ballet that ought to be an integral part of Act 2, there is a sudden dazzling and painful reminder of what entertainment on the highest level can be.

The cast is last year's altered only in its leading lady Barbara Daniels, a small, attractively

snub-nosed American soprano (Falke is hard pressed to explain away her nationality) makes her Covent Garden debut as a Rosalinde of high spirits, easy address, and confident personality. She attacks the spoken parts of her role more vigorously than her predecessor, Kiri te Kanawa, but lacks her gorgeous, free-ranging tone—the voice is of serviceable quality, though in the *Canaris* the top notes tended to spread.

Otherwise, the rewards of the evening are chiefly to be gained in watching old hands charming us into a temporarily heightened state of wakefulness—Hermann Prey an Eisenstein ebullient to just the right degree of overbearing self-regard, Hildegard Heichele an authentically plucky, vivacious

Adele (in voice a little less true for "Mein Herr Marquis" than last time round), and the wonderfully wry and pickled French, body angled at a permanent 45 degrees, of Josef Meinrad, the one notable success of the production. Benjamin Luxon opens "Brüderlein" with eloquent smoothness; it is not his fault that Falke as a dramatic role has all but disappeared. Zubin Mehta draws light, buoyant playing from the orchestra. Yet somehow, in matters of timing, timbre, and dramatic accent, in the art of knowing when to hold the pulse back and when to urge it forward, the true spirit of the work continues to evade him. He is not the only architect of this production against whom the charge could be laid.

Paris: Palais des Congres

## The Kirov Giselle

by CLEMENT CRISP

Looking at the Kirov Ballet after far too long an absence, I found the Leningrad company as grand and satisfying as ever, its glories all the more apparent because of the indifferent state of classical dancing elsewhere in the world. There were rumours that the Kirov had fallen on dark days, that the glory—with certain distinguished artists—had departed. Not so. The four performances have just seen during the company's Paris season (which lasts until January 2) revealed a troupe still supreme as a classical ensemble. It is not as strong as the company which came to London twice during the 1960s. Its male principals are nowhere near the calibre of Semenov, Sokolov, or the late and ever-lamented Yuri Solovov. The Palais des Congres stage is not the right setting, albeit preferable to the Festival Hall's shelf. But it is the Kirov still, and marvellous.

Nowhere in the world is there a corps de ballet so harmonious in style and feeling for dance and music; not regimented, but united in expression and in understanding in *Giselle*, which featured on my first two visits the second act had three ballerinas: the *Giselle*, the *Myrtha*, and as I have noted before, the corps which is a single Protean *asolo*. Not since that first revelatory *Bayadere* in London in 1961 have I witnessed so poetic and exciting a use of an ensemble of 32 dancers as the present Willis, who seem to feel and dance as one. Uniform in sensibility as in height, they are a miracle.

The stage at the Palais des Congres is large, and on it the Kirov *Giselle* looks superior to any other current staging. An oddity of the season is that the music for both the programmes saw (the third brings Roland Petit's *Notre Dame de Paris*) has been recorded by the Kirov's orchestra under Viktor Fedotov. Played as only Russian orchestras know, an accompaniment that is dramatically powerful and emotionally ant, shaded with love for both music and ballet, it is an achievement in itself despite certain discrepancies in tempo that individual dancers might prefer.

The expensive (20 franc) programme was uncommunicative about the dancers—no credit at all for the peasant pas de deux—and it announced simply that the *Giselle* staging had been renewed under the supervision of "I. Slonimski," whom I assume to be the late Yuri Slonimski, Russia's most distinguished dance historian. It is a version satisfying beyond all others despite some quaint costuming in Act 1 (the Duke of Courland is Dandini: *Giselle* is in sea-through tulle) because of its association of the Romantic ethos, and because *Giselle* has been regularly performed in Russia since 1842, the year after its Paris creation.

Edited and amended across the years by Perrot, Petina and Konstantin Sergueev, it has the wisdom and grand simplicity that comes with such impeccable lineage. The story is told directly, cogently. The characterisations live within the context of an overall emotional understanding of the work, not in spite of the staging as so often in Western productions, and they are consistent with its general tone. (There is only one odd lapse: a large earthenware vase of flowers stands determinedly on a white drape outside *Giselle*'s cottage to provide the blossom for the flower test.)

This apart, the presentation, even in matter of decoration, makes nonsense of Western stagings with their dainty fuss and flustered Romanticism, and their busy and predictable interpretations. The Kirov's Act 1 is set in a broad expanse of countryside as seen by a German genre painter of the 1940s. Act 2 is perfect, a midnight black forest lit by a faint red glow remaining from the setting sun, the moon glimpsed through a clouded sky. The unfolding details of old-fashioned stage machinery cause *Myrtha* to rise rampantly from her grave, and allow a will to whisk through the night air and show *Giselle* poised high among the tree branches. Even follow-ups cannot destroy the potent illusion of this Rhineland forest where magic must happen.

Most magical of all is the Kirov dance style. This is the

true, the only and ideal way of dancing the classics of the 19th century. Leningrad training has refined and extended the possibilities of the dance d'ecole, opened it out and given it wings, and yet retained its essential nobility and decorum of proportion. In Act 1 eight girls dance a ballet of their corporate elegance we see how surely each feels and appreciates the reasoning that lies behind the laws and attitudes of the classic dance. In the performance of Irina Kolpakova, the *Giselle* of last Sunday's matinee, we witnessed the academic dance at its purest. Kolpakova danced an *Aurora* in London in 1961 which remains the finest example of classical dancing that I ever expect to see. By the purity and radiant harmony of her style, by her ease and aristocratic means, the language of ballet was shown as the most beautiful activity of which the human frame is capable. If dancing can ever attain formal perfection, it was most nearly so with Kolpakova's *Aurora*. Seventeen years later, and at a time when unchivalrously I must observe that many ballets find their laurels fading, Kolpakova is still a peerless classical artist.

Her *Giselle* has acquired more pathos than when we last saw it in London: its innocence and unpalpable flights remain as poetically touching as ever. Her Albrecht was Sergey Berezhnoy, a performer of finesse and some Romantic fervour. He, like Nikolay Ostafstov, the Hilarion, knows how to give weight and a broad fluidity to gesture: it is a minor revelation to see mime played with such expansive dignity, commanding both the largeness of the stage and our sympathies.

The other *Giselle* was Galina Mizensova, who is being presented in Paris as the company's second star. She is a tall dancer, blessed with the Kirov's first vibrant line, seeming at first rather bland in manner. I was bothered by a lack of ease in the carriage of her head—she has a slightly short neck—but her physical command of the dance, an essential distinction of technique, music-

ality and long, legato phrasing, make her a continuing pleasure to watch. Her mad-scene indicated reserves of emotion, and in moments of supreme delicacy—feet sketching the memory of earlier, happier steps as madness seized her—she was most pathetic. As the Will, her dancing was effortless, serene. Though I suspect that she is not a natural *Giselle*, hers was an interpretation of unquestioned merit. Her Albrecht was Konstantin Zaklinsky, only four years out of the Kirov school, and still immature. Tall, handsome, he is a sound partner, but at present his reading is testimony to excellent coaching rather than to individual feeling. Gabriella Komleva and Lyubov Kunakova were the two *Myrthas*, dancing grandly.

And the corps de ballet was flawless. To see 32 girls moving with such lightness and freedom, pure in style and united by training and temperament, was to understand why the Kirov is the repository of the classic dance. (It was also intriguing to note that, mutatis mutandis, the approach to dancing with the Kirov and with New York City Ballet, where Balanchine has transplanted and transmuted Petersburg-Leningrad academism, has a fundamental aesthetic accord.)

Part of the Kirov's secret is that the entire company seems inspired by a common image of what they are dancing and how they dance it. There is no indecision; there are no apologetic arms, no reluctance to give a step its fullest dynamic value. The same artistry inspires both principals and corps because it is part of the very fabric of their training. The presentation of *Giselle* was magnificent because of this. Its tone was consistent, poetic, no matter what small incidents might be improved, and the ballet became not a dutiful re-creation of the past, but a living expression of the genius of a company.

I shall hope to report soon on the second Kirov programme, a triple bill which brought Olek Chenchikova to light up the Paris sky in *Paquita* with a sun-burst of bravura dancing and youthful beauty.

## SPORT

RUGBY UNION BY PETER ROBBINS

## All Blacks put emphasis on attack

A LAST-MINUTE drop goal by Dunn their fly-half gave the All Blacks victory over the Barbarians 18-16.

Yet again the tourists rescued a game in the nick of time, but the more significant rescue was of rugby itself after the acrimony of the match against Bridgend.

Saturday's occasion was fully worthy of the tradition of these matches and no one can carry at the result of the refereeing of Mr. Sanson.

The game demonstrated that it is possible for top-level matches to be played vigorously, cleanly and with the emphasis on attack rather than defence.

The match showed that the New Zealand team's success came from team work and tenacity. The absence of stars has been an advantage for under Graham Mourie, the All Blacks have again refined their game to a great technical consistency.

Their defence was well organised, with good alignment and fierce tackling. Osborne, Robertson and Taylor closed up any central attack and played plenty of ball for Mourie or Rutledge.

The first choice No. 8, Sear, has not played at his best. It was a surprise that Fleming did not get an international place behind those two hard men, Hader and Oliver. New Zealand improved their scrummage when Knight returned from illness.

These All Blacks will be remembered as a great set of men, and that is just what supporters can carry away from being good players. They have achieved their aim of making friends but, after their defeat by Munster, they almost reverted to type using Bruce to kick tactically.

It was quite different on Saturday when the tourists dropped their guard and the choice of Loveridge and Dunn gave the side attacking potential. New Zealand looked underprepared to take some short penalties.

It was a change to see greater freedom of expression from the players.

New Zealand used their wings Wilson and Williams intelligently by bringing them in to the midfield. Wilson and Osborne have been the outstanding three-quarters in what one

former All Black winger perhaps rather unkindly, called a bunch of good tradesmen. Saturday's match proved that in rugby, you must take your chances. The Barbarians failed to do so.

Hutchings, the centre, messed up two scoring chances by ignoring Elgin Rees after Renwick had intercepted in the first half. A score then would have been a tremendous blip, but in the second half, Hutchings next ignored Slemen. Renwick too lost the ball over the line in the second half.

In the counter-attack, Bennett and Irvine were able to demonstrate their great artistry. What a loss Bennett is to Wales. It was interesting that he did more defensive work than normal.

Flankers can channel the straight runner, but it is the finker that causes problems. Both Bennett and Irvine have the gifts of pace and evasiveness, which transcend the normal level of player.

Looking at Irvine made one reflect upon how the roles of almost every player have changed over the years, especially full-back.

The one role that has changed

little is that of scrum-half, for it is still the fulcrum of all the movement. Brynmor Williams was much too individualistic on Saturday and seemed to have difficulty positioning himself to get the ball away.

He was under pressure and communication with Rives and Skrela must have been difficult. Thank goodness for those two Frenchmen in the loose where there tackling was as definite as ever. France must be mourning the fact that Skrela has retired.

Purely from an England view, Slemen had the chance to show a Welsh crowd his skill in football. The other wing, Elgin Rees, was a ball of fire and it remains one of the national mysteries why he did not play for Wales against New Zealand.

There were some splendid personal performances, but Saturday's game encapsulated all that rugby should be. A meeting of fit minds and bodies in pursuit of victory which, if gained, would be acceptable. If lost, not the end of the world.

In either case, Saturday's game must have produced or confirmed some lasting friendships.

Warehouse

## The Hang of the Gaol

by B. A. YOUNG

We are attending the Government inquiry into the burning down of Middlesbrough Prison, estimated to cost £300m to rebuild. The inquiry has been called by the Home Secretary, a roughneck whose principle is "We did not pick the system, but we've got to make the best of it," and who sees nothing inconsistent with his advocating social equality but living to plutocratic standards. Its members are Jardine, an experienced senior civil servant concerned only with doing his work conscientiously enough to ensure his KBE on retirement; Matheson, a female civil servant likely to develop on the same lines; and Pontine, a new boy who, after his first taste of grilling a witness is so appalled by his unexpected delight in oppression that he quits the scene to live as a tramp on the moors.

The cause of the fire is easily discovered by two competent fire inspectors. What is then required is to ascertain who caused it and why.

The prison appears to have been seething with discontent as a result of the humane notions introduced by the new governor, Colonel Cooper, who tells his prison officers, "Give them their dignity." But the fire hasn't been started by any of the prison staff, nor by Turk, a prisoner who has actually started a fire of his own so that he may be regarded as a hero in the legends of prison life everywhere. In fact, Colonel Cooper has started it himself: and why he should have done so, and what the consequences are, is the theme of Howard Barker's fascinating play.

The interesting thing is that, apart from Cooper's lapse, everyone acts in accordance with decent principles. Cooper really thinks that a prison can be run with "the beauty of



Christopher Benjamin and Nigel Terry

Leonard Burt

good government." The prison officers, Udy and Whip, are not against good government, but they know that when there is a riot it is they that get the slashing, not the governor. Turk, who has an interesting speech comparing prison discipline with old-fashioned imperial government, is after all only being Kenyan or Gadhafi. Mr. Barker draws his figures in bold, simple lines with no more exaggeration, and no less, than is needed to make

his points, and though he is too often tempted into irrelevances that take his fancy, and is most amused than I am by the functions of defecation and micturition, he puts his points as persuasively as Hogarth or Gillyray.

Bill Alexander directs a characteristic Warehouse production that is good with some outstandingly good playing. Fulton Mackay's Jardine, a middle-aged man resentful of the quenching of his early ardours,

is shown in perfect detail, every gesture of the arms, every smoothing of the hair, every glance up or down, every stroking of the chin incontrovertibly apt. Edward Jewsbury plays Cooper with a touching blend of dignity and pathos; Nigel Terry has caught exactly Turk's deceitful simplicity concealing the fires of revolt. There are able performances too by Christopher Benjamin, Gaye Brown, Nicholas Le Prevost, and indeed all the company.

FOOTBALL BY TREVOR BAILEY

## Queen's Park Rangers lift the gloom

QUEEN'S PARK RANGERS have every reason to be well satisfied with their victory over Manchester City by two goals to one in a thoroughly interesting match at Loftus Road. This result, against more talented opposition, was a real tonic for the club, who had not won a league match since early October, were too close to the bottom of the table for comfort and whose home gates had slumped alarmingly, with only 12,000 turning up to see them on Saturday.

Judging by this performance, they should have no difficulty in avoiding that dreaded fall as they not only look a far better team than they were at the back of the league, who have made them relegated by the narrowest of margins, but there are also several clubs around, who are not up to Second Division standard, let alone First Division.

The Rangers will probably finish up near the middle of the table, which means that their only remaining hope for glory is in the FA Cup. Yet there must be doubts as to whether they possess sufficient character to fight their way through to Wembley. Their draw against Fulham, away in the third round, should provide an interesting test.

Not the least satisfactory feature of the Londoners was

the performance of their young, tall and lanky striker Hamilton bought from Linfield, who came on after the interval as substitute and scored both goals. His first was a brilliantly-taken volley, and he showed he had the instinct for being in the right place at the right time by popping up at the far post to nod home the second. The Irishman replaced the former England captain, Gerry Francis, still struggling to regain his true form after a series of injuries and who looked uncomfortable as part of double spearhead with the lively and impressive Eastoe.

The match was unusual in that both teams employed high-calibre players, who have made their names as attacking half-back — Francis and Deyna from Poland — upfront. This is rather like giving the new ball to a spinner, or batting Boycott at No. 4. It seldom pays to play an established performer out of position and, though Deyna did manage to produce two fine shots before the interval, he was also eventually substituted.

In his recent book, the ABC of Soccer Sense, Tommy Docherty stressed the importance of a good club captain who has the respect of his colleagues, although many managers are inclined to be suspicious of a skipper with a very strong personality. It is

interesting to reflect that Terry Venables at 20 lasted only two years as skipper with Chelsea, rather longer one suspects, than he would have done at a mature 30.

QPR are both wise and fortunate to have Hollins as their captain. He runs further and works harder than anyone, never gives less than his best.

There are, perhaps, six league clubs with as many class footballers on their staff as Manchester City. Several of these players, currently languishing in the reserves, would have no problem commanding a regular first team place in most other sides. Nevertheless, the City have now gone eight successive league matches without a win and were also easily eliminated from the League Cup, but still managed to knock AC Milan out of the UEFA Cup with style. At their best they are capable of beating anybody.

Their manager has the players. Why are they not obtaining the results? Some of the reasons were to be seen against the Rangers, a game they should have won, but ended just about deserving to lose. Although they provided several patches of imaginative and adventurous football, they also perpetrated too many mistakes.

Some of the errors appeared to stem from over-ambitious first-time passes, while there

were also moments of casual arrogance which few sides, and certainly not Manchester, can afford. The City reminded me of a colourful and exciting jigsaw which Tony Book has still to slot into the right places.

Nearly all the important ingredients are there, an outstanding goalkeeper, a powerful rearguard containing Dave Watson, a centre-back of international class, five outstanding midfield players on call who are fast, skilful and hard.

All the halves were goal-conscious and, if Parkes had not been in exceptional form and some of their shooting fractionally off target, they could well have won, as they created sufficient opportunities.

The lack of blend and flow was most noticeable upfront. Whatever trio selected from Fletcher, Channon, Kidd, Deyna and Barnes — fine last a running winger able to destroy the opposition with his dribbling skill, but on other occasions frustrating his own colleagues by running into trouble — has not acquired the necessary harmony. This is underlined by a lack of goals from their forwards. Possibly it might pay the City, if one of their half-backs busied himself preventing, rather than scoring, goals, though their welcome accent on attack is why they are invariably worth watching.



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## The world as a whole

ALL THIS year China has been moving outwards. Chinese leaders have visited Yugoslavia and Romania—in Soviet eyes the dissident states of Eastern Europe—as well as South East Asia. There have also been high level visits to the West and there is talk of more to come. At no stage have the contacts been purely political: as often as not what the Chinese have been seeking, especially in the West, has been commercial and technological know-how.

## Reverberations

In that sense, it is not surprising that Peking should have wished to accelerate the normalisation of its relations with Washington. If it is access to technology that the Chinese want, the United States after all is as good a place to go as any, not least in the key fields of agriculture, mining and energy. It is also true that the leadership has already come to terms with the other advanced industrial democracies. The signing of the treaty with Japan earlier this year was the final evidence of that. It would indeed have been abnormal if Sino-U.S. relations had remained on a lower level than those between China and other Western countries.

It should not be forgotten either that although the announcement of the Sino-American agreement may have seemed to come out of the blue, there had in fact been a steady diplomatic build-up over a period of years. The breakthrough came in 1972 when President Nixon visited China. The joint communiqué then left open a number of questions—particularly that of the future of Taiwan—but it left no doubt of the mutual desire between Washington and Peking to put their relations on a normal footing.

The question of Taiwan remains open to this day and is perhaps insoluble in the short-term. At the same time, however, there is nothing in the behaviour of the Chinese leadership to suggest that Taiwan will be taken by force. Nor would it be in the Chinese interest to attempt any such thing. All the signs are that China is looking outwards to a wider world, and there is no obvious reason why it should not come to live with Taiwan in the way that it has come to live with Hong Kong. Those relations, too, can be normalised over time.

Yet, however foreseeable and however much it can be explained as merely a logical

development of past diplomacy, the establishment of full diplomatic ties between China and the U.S. is bound to have reverberations around the world. In particular, they will be felt in Moscow where the Soviet leadership is believed to be on the brink of signing a second strategic arms limitation agreement; the ditching of Taiwan, even with the assurances that Peking has clearly given, may raise questions among other traditional American allies (Israel, for example) about President Carter's constancy.

There is thus a special responsibility on the U.S. in the strict sense of the word, the U.S. is the world's only superpower. The Soviet Union may have achieved strategic parity, but is way behind economically and in most areas of technology. China is a great power which is now understandably seeking to play a larger role in the world. It should be encouraged to do so, but it is not a superpower at all and it would be dangerous if it came to entertain delusions of grandeur. Both economically and politically there have been signs recently that it has been taking on too much, too fast. U.S. diplomacy would be wise if it could seek to temper these ambitions.

## Strategic

The principal task of U.S. foreign policy must be to maintain a global balance of power. The establishment of proper relations with China could contribute to that end, but not if it is seen as an anti-Soviet alliance—as the Chinese are tending to present it. In other words, there is a difference between normalisation—which is to be welcomed, and rapprochement—which could be misunderstood. It is necessary now for the Americans to continue their negotiations with the Russians and to explain to them what they are doing with China. Equally, the Chinese need to be told not to let their own relations with the Russians get completely out of hand. A Sino-Soviet confrontation would benefit no-one, not even the West. It is a difficult world in which to maintain stability, but the latest developments are at least a reminder of the necessity to think in strategic terms—of the world as a whole.

PRESIDENT CARTER may have surprised the world on Friday night when he announced that full diplomatic relations with the People's Republic of China would be opened on January 1, but his decision was entirely logical. It was consistent with everything his two predecessors in the White House had pushed for since 1972 and with the signals the President had been getting from Peking's new and outward looking leadership for much of this year. The Chinese ultimately made an offer that Mr. Carter felt he could not, in good conscience, refuse.

Mr. Carter has taken a step which is not without dangers, but one on which he clearly felt the pluses outweighed the minuses. The latter are obvious: the domestic right wing is already up in vocal arms and could make trouble in Congress next year; the Soviet Union is certain to be offended, though perhaps not to the point of upsetting the long crafted and soon-to-be concluded Strategic Arms Limitation agreement; the ditching of Taiwan, even with the assurances that Peking has clearly given, may raise questions among other traditional American allies (Israel, for example) about President Carter's constancy.

## Potential pitfalls

But he must also have come to the view that he had answers to these potential problems which, combined with the geo-political and economic benefits likely to accrue from normalisation, made the historic initiative imperative. Mr. Carter is now quite secure in his presidency and a solid favourite for re-election in 1980. The disparate interests which often oppose him have shown little ability to coalesce into an overwhelming countervailing force and probably could not do so over China. In any case, the business community, which underpins the Republican Party, is more likely to be enthused over the opportunities provided by closer ties with a China now hungry for Western technology

THE SINO-U.S. communiqué on Friday was the culmination of a period of increasingly active global diplomacy by China directed towards much closer relations with the West and against the USSR. This began about a year ago with high-level trade and economic missions and was swiftly followed by foreign tours by the Chinese Foreign Minister Huang Hua, taking in not just Europe and the Middle East but trouble spots like Zaire, and in the summer, by Chairman Hua Kuo-feng's trip to Romania and Yugoslavia. Foreign Minister Huang paid a four-day visit to Britain in October. Chairman Hua has been invited to visit France, West Germany and Britain, and these visits may take place next year.

An eight year \$20bn trade agreement was signed with Japan in the spring, and after years of stop-go negotiation a treaty of peace and friendship with the Russians in October. This treaty represented a considerable triumph for Peking since it contained an agreement to oppose "hegemony" in the area—a clause which was widely understood to refer to the Soviet Union. In order to get the treaty signed, both sides agreed that the controversial issue of the ownership of the Senkaku Islands, valued for their proximity to offshore oil, should be shelved.



Teng Hsiao-ping—dropped a number of public hints in November.

than dismayed by ideological considerations. Even the cold war philosophies of such labour leaders as Mr. George Meany, head of the U.S. equivalent of the British TUC, are likely to be tempered by the fact that a leading architect of the Sino-American rapprochement is Mr. Leonard Woodcock, chief of the U.S. mission in Peking, who was a brother union leader when head of the United Automobile Workers.

Equally, Administration officials seem to feel that the Soviet Union will be nothing if not realistic about normalisation, much as it may be disliked. Over the weekend there has been confident talk that a SALT agreement will be reached very soon and that Mr. Carter and President Brezhnev may even meet to cap it before Teng Hsiao-ping, the Chinese Deputy Premier, comes to Washington at the end of January. The U.S. clearly does not feel that China and the Soviet Union are about to go to war, but would not mind if the Russians were to feel compelled to divert some of their European forces protectively to the China border area. Had normalisation come earlier this year, when U.S.-Soviet relations were at a low point, then the adverse consequences might have been greater. But, it is felt here, that understanding with Moscow has improved considerably in

## Mr. Carter bows to his two predecessors

recent months as it has become clear that President Brezhnev is as intent on reaching a SALT agreement as President Carter. Administration officials have also rigorously denied that the timing of the announcement of normalisation was in any way influenced by the need to distract from other pressing

liaison chief in Washington that he was as interested in pursuing full diplomatic ties as his two predecessors (President Ford, it is reported, is believed to have promised Peking that he would establish full relations early in 1977 if he was elected President).

When Mr. Vance went to



Carter—on offer he could not refuse.

had been a number of public hints dropped by Deputy Premier Teng in interviews with American journalists making the same points. The last two weeks have been spent wrapping up the final details.

While not perhaps a principal underlying factor, trade potential is clearly a significant incentive to improving the China connection. In spite of a number of eye-catching recent deals involving U.S. companies (Fluor, Bethlehem, U.S. Steel, and Intercontinental Hotels), in spite of the negotiations of major U.S. oil companies over offshore Chinese oil exploration and in spite of the hard offers of co-operation made by both Agriculture Secretary Bergland and Energy Secretary Schlesinger, there was the suspicion that the U.S. might be left behind by Japan and Europe in competing for Chinese business at a time when the U.S. trade deficit was a source of major international concern.

Two-way U.S.-China trade this year will probably amount to about \$1bn, about three times as much as in 1977, with the U.S. comfortably in surplus. But over the first half of this year Japanese sales to China have been six times larger than those from the U.S., with common market volume four times as high. There remain some inhibiting factors for the U.S., particularly on financing

Financial Times Monday December 18 1978

These include pre-revolutionary Chinese debts, and disputes over assets frozen by both countries 30 years ago. (Treasury Secretary Blumenthal is to go to Peking to try to resolve these issues soon) and the limitations on export-import bank financing imposed by the 1974 Trade Act denying the People's Republic "most favoured nation trading status." Encouraging China to earn hard currency by selling more to the U.S. could also create difficulties since the most obvious Chinese products are low cost textile goods—the U.S. textile industry, as is well known, has suffered considerably from similar imported competition, mostly from other Asian countries.

But again, the potential pluses appear far to outweigh the minuses. In certain areas, such as oil exploration, transportation, particularly aircraft, and construction, the U.S. seems to feel it still has unique services to offer, while opening up the Chinese market to diversified U.S. agricultural produce is certain to help the trade deficit.

## Key figures involved

In analysing the U.S. thinking on China it is easy to see a number of hands at work. Dr. Brzezinski, for example, clearly had a major role to play, as did Dr. Schlesinger (though it looks as though the latter will not be rewarded with the Peking Ambassadorship, probably because the President does not want to offend Moscow too much by putting a known anti-Soviet hardliner in China). Mr. Woodcock, who has worked diligently towards normalisation, is the likely choice. But at the end it was Mr. Carter's decision and, in that respect, he has played the intimate fascination with China that seems to consume all Western leaders. Mr. Nixon was unable to reach a logical conclusion because of Watergate and Mr. Ford because he feared what normalisation would do to his election chances. But for Mr. Carter there was no compelling reason at this time not to effect what his predecessors had wanted.

## The culmination of a year of Chinese global diplomacy

BY COLINA MACDOUGALL, in London

Vice Premier Teng made it quite clear to two U.S. journalists in November that China was prepared to allow Taiwan to maintain its own social and economic system even if it were united with China after normalisation. This is presumably the attitude which has enabled President Carter to accept Peking's previously formulated conditions for normalisation, which were the withdrawal of troops from Taiwan, the abrogation of the 1954 security treaty, and severance of State relations.

## The Taiwan question

The U.S. has always said that it wanted some public understanding by the Chinese that they would not try to take Taiwan by force. This does not appear to

have been given but Peking may have offered private reassurance. On the question of continuing arms sales by the U.S. to Taiwan, Chairman Hua has said they cannot continue, though ordinary trade is to be allowed. However, Chairman Hua also indicated that the question of Taiwan can be shelved for the moment.

The agreement with the U.S. may partially stem from the recent high-level leadership meeting in Peking (Teng confirmed that it was taking place in an interview with an American journalist) and the fact that this was not followed by even the briefest official communiqué. Normalisation was presumably discussed during the meeting and possible Chinese concessions on the future of Taiwan thrashed out. While Teng is reported to have said that the meeting dealt mainly with China's modernisation

plans, this would not exclude relations with the U.S., which, the Chinese fully realise, has the world's richest technological resources and could therefore greatly help accelerate Chinese development.

However, the radical rump left in the Chinese leadership and even the more cautious pro-Western leaders may have taken some persuading that immediate normalisation was worth doing without full U.S. capitulation on Taiwan. It was presumably this division that at least partially accounts for the outbreak of wall posters in the Chinese capital in the second half of November. First, the posters showed both officials at the meeting and the world at large that Teng commanded strong support among the people. Second, the contents of the posters, many of which will have since been circulated round China, will have helped to

## prepare Chinese public opinion

One poster compared the economic performance of China unfavourably with that of Taiwan and another made the same comparison with the U.S. Since this poster outbreak is thought to have been officially inspired, even if it sometimes went out of bounds, this may have been intended to implant the thought that if Taiwan is reunited with China, Peking might do better to move closer to the economic and social system of the island rather than to try to bring it nearer to its own. While other posters asking for more human rights—particularly the one that appeals to the President to "begin to treat with large purchases of U.S. grain, in recent weeks it has disappointed further with huge deals for iron mining and other machinery similar to the orders Peking has placed elsewhere for capital equipment.



Hua Kuo-feng—invited to France, West Germany and Britain next year.

perceives from Moscow, Peking is also keen to build up trade. Last year it indicated that it would leave the U.S. out of its trade expansion plans until normalisation, but this year the resolution began to break with large purchases of U.S. grain. In recent weeks it has disappointed further with huge deals for iron mining and other machinery similar to the orders Peking has placed elsewhere for capital equipment.

## What the market will bear

THE PRICE increase announced by OPEC at Abu Dhabi yesterday will take effect in four stages, but by October 1 next year will—if fully carried through—have raised crude oil prices 14.5 per cent above their existing levels. This is marginally more than most consumer nations had been expecting, and certainly larger than the U.S. Administration—which made known its disappointment yesterday—had anticipated. But even before the crisis in Iran, demand for crude as reflected in spot prices had been tightening. The cutback in production in Iran added to the pressure. For 1979 as a whole the increase in oil prices amounts to about 10 per cent. On present forecasts this is about what the market will bear.

## Price freeze

The lesson that OPEC has now painfully learned is that there is little point in attempting to raise prices beyond what demand will sustain. The price freeze of the last two years and the shaving of prices for marginal crudes were the result of raising prices to unrealistic levels. Though much of the debate at OPEC is often a political battle between the moderates (basically Saudi Arabia) and he hawks (Iraq, Libya and Algeria), how the dice finally fall depends on the strength of the market.

In the last resort this outweighs even niceties of economic judgement on how much

the OPEC producers have lost out in purchasing power through the fall of real oil prices over the last two years or through the loss of revenue following the decline of the dollar. In going for a stage-by-stage increase, OPEC has given itself some leeway to back down if demand should slacken. But the stage-by-stage tactic could also point to a steady measured increase in prices in the long-term if, as seems likely, a growing shortage of crude materialises in the 1980s.

## U.S. inflation

The OPEC nations have apparently put aside plans for denominating oil prices in a unit of account other than the dollar as too clumsy to operate. But the increase could further weaken the dollar through the impact it will have on the U.S. inflation rate and the size of the U.S. trade deficit. This will be the major source of concern as the increase takes effect. President Carter will undoubtedly be under pressure in the U.S. to scrap his plans for decontrolling domestic oil prices as adding a further inflationary twist to the U.S. economy. Other industrialised nations will rightly be pressing him to stick to his plans as a means of reducing the heavy U.S. consumption of energy. They want the U.S. to cut back its dependence on oil imports both to diminish the power of OPEC, and, through improving the U.S. trade deficit, to help strengthen the dollar.

## MEN AND MATTERS

## IBM joining the lump

With its "utterly unashamed use of concrete" the National Theatre has, for good or bad, set its stamp on London's South Bank. Now the architect involved, Denys Lasdun Redhouse and Sothley, are poised to stamp again, this time on the site between the (also concrete) Festival Hall and the more stately tower of London Weekend Television.

Its client is IBM which tells me that DLRS are preparing a feasibility study for a centre for their regional marketing. At present the South Bank site in question is leased from the Greater London Council by Associated Newspapers. It is one of several which IBM is considering but is the one on which the most detailed work has been done for an office which is designed to see IBM through the 1980s. The work could cost over £20m.

IBM says that it still has to complete the various planning

stages involved but is "looking for something to happen in the fairly near future. Asked whether more concrete might not cause more controversy the firm replies: "We are concerned at being socially responsible." As for the architects—who are in round as describing the Shell Building as "the lump"—they tell me that it is still early days to talk of the design that may be adopted.

Peter Sothley, who spent 13 years on the National Theatre, stresses that DLRS's different building have used many materials, though he also talks of a family resemblance between them. He says that the new building will have to be a "good neighbour" to both the Festival Hall and LWT. If so it may have to cross concrete with the white mosaic and glazed glazing of LWT. Perhaps IBM has a computer to tell us how?

## No third

BBA, the betting and industrial materials group based near Bradford, has had to retire embarrassed and hurt after a skirmish with our young generation. Last September it offered a prize of £50 to students in local secondary schools for an essay on the tantalising topic: "A career in industry—an opportunity or a dead end?" A second and third prize were also offered.

The group, which prides itself on being one of the bigger employers in the area, sent letters to headmasters and careers masters. It followed up with information packs, posters and publicity material. It sent out reminders and it put advertisements in the local press.

But now the group is flicking its wounds. "We had hoped to stimulate the younger generation to come up with some bright new ideas," BBA says woefully. But the total response

was four letters—two of them from headmasters wishing well but saying their schools would not be entering.

## Organolepsy

Hard on the heels of the news that the Swedes are issuing standards for Father Christmas comes a comparably baffling announcement from the British Standards Institute. Covering "Sensory analysis—apparatus standard BS5588, Part 1: 1978 is, I learn, identical with that prepared by sub-committee 12. Sensory analysis, of technical committee 34. Agricultural food products, of the International Organisation for Standardisation."

The sophisticated object of such inquiry turns out to be a wine-tasting glass. Having established its claims to be taken seriously with such labyrinthine phrases, the standard is quick to wax poetic, or nearly so.

The glass may be used to test "all organoleptic characteristics of wine samples." It shall consist of "a cup (an elongated egg)" supported by a stem resting on a base. It should never be completely filled as space is necessary "to collect the volatile substances given off by the sample before the olfactory examination." It should be washed only in distilled water, with the use of detergents prohibited and cleaning by use of concentrated mineral acids not permitted. Odourless ink should be used if marking is necessary and "to avoid the influence of body warmth, the glass should be grasped by the stem only, and the cup should not be touched by the fingers or the nose."

Sommeliers, and wine experts, it appears, are determined not to let such orders interfere with their sensory analysis. As Victoria Wine told me, it all seems rather far-fetched. In any case

there is perhaps some consolation in the news from Dublin of the test-marketing of draught Guinness in bottles.

## Courting friends

One partial casualty of the suspension of The Times is an attempt to computerise that peculiarly British institution, case law. CLARUS, an acronym for Case Law Report Updating Service, is due to come into operation in January and will allow lawyers to summon up the latest court decisions in whatever field they choose at the press of a button.

"For around £1,000 per year we will offer subscribers a centralised library function," says Dr. Stephen Castelli, director of Infolex, the firm involved. CLARUS is to use the Post Office's Viewdata equipment and Castelli describes how Infolex has been feeding digests of the main legal journals into its computer. But it relied on The Times Law Reports for up-to-date coverage.

Castelli is still not sure how that hurdle will be overcome. Though the foreign counterparts of CLARUS all flourish, he still only has six sure subscribers, he tells me.

He says that one U.S. system was considering storing all case law established here since the second world war. Apparently among the problems this raised was that British decisions would have been registered on a computer based in the U.S., a difficulty for lawyers who do not mind having a machine as their learned friend, providing the friend is at home.

## Bitter tidings

Card pinned to a street singer's coat in Chelsea: "Ex-service Christmas tree—decorated and then thrown away."

Observer



## Have you seen him?

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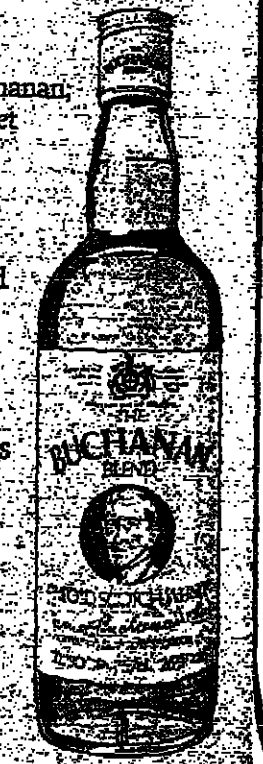
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## FINANCIAL TIMES SURVEY

Monday December 18 1978

هكنا من الاصل

## Big spending pays off

By James Buxton

TRANSPORT IN the Arab world has been almost totally transformed by the economic revolution in the region over the past five years. The surge of imports after the 1973-74 oil price rise caused dramatic congestion at ports, airports and road border posts. While extraordinary short-term remedies had to be applied to bring goods in quickly, a big programme for building new or expanded port, airport, road and railway facilities got underway in the richer countries. Now the import boom has peaked, but in the process the transport systems of most Arab countries have improved out of all recognition.

A rough indication of the pressure of imports which the Arab world had to cope with can be seen in the statistics of the OECD countries' exports to the Middle East, which in this case omits North Africa but includes Iran. Exports by these countries (making up about three quarters of total Arab purchases) increased in value by almost 60 per cent in 1973 over 1974, then by 14 per cent in 1976 and by 19.5 per cent in 1977. (Being measured on an fob basis the statistics do not accurately show what these imports actually cost the Arab world, this being much higher because of port congestion, shortages and domestic inflation.)

Congestion was at its worst in 1975 and 1976, when ships could wait up to half a year to enter such ports as Jeddah and Dubai, and emergency measures were deemed necessary for bringing in imports, including the use of a helicopter to lift bags of cement from ships waiting outside Jeddah. The very high freight rates to the Middle East, boosted by congestion surcharges, made it economic for expensive specialist roll-on roll-off vessels

to run from Europe to the Red Sea and Gulf, and for towed barges and lighter-ship systems to make their debut in the region, while some unusually large but urgently needed cargoes went by air freight, and heavy lorries made the costly and hazardous overland journey to Arabia and the Gulf.

## Reacted

The oil exporting states reacted to congestion by slowing down their economic growth rates (the pressure on all parts of their economies, not just their ports, had become agonising), hurriedly bringing new port and airport capacity into use and belatedly using draconian measures to crack the human problems which were holding up the clearing and removal of goods from the ports. Shipowners played their part by introducing containerisation in 1976. In the second half of 1977 shipping rates to the Middle East fell by more than a third and have not recovered. For the ro-ro operators the collapse was even more severe, while as described in this Survey, the economies of much road haulage business to the region was simply destroyed. This year it is the air freight operators who have in many cases, seen their traffic fall.

That is not to say that the game is up for those operators of means of transport other than conventional shipping. To the wealthy oil states there is still a small place for ro-ro shipping, while for some high-value cargoes direct overland services

and air freight still justify their necessarily high rates. And it is often forgotten that the majority of Arabs live in relatively poor non-oil exporting countries like Jordan, Egypt, Sudan and North Yemen. Because of the inflow of aid, investment and remittances from expatriate workers these states are now all in varying degree enjoying their own booms. But they have less capital to spend on new ports and transport facilities, and it is in these poor relations of the Arab family that port congestion and its attendant effects still exist, and has to be circumvented.

Partly as a direct reaction to congestion, and partly as a result of their wealth, the oil rich states are in the process of completing an enormously superior transport infrastructure to that of the early 1970s. In the Gulf and, to a lesser extent, the Red Sea, ports are being expanded and new ones built. The most egregious example is the United Arab Emirates, where economic competition with a political twist will result in the federation having by 1982 more than a third of the 350-odd commercial berths in the Gulf (including Iran)—for a state that has only 2 per cent of the region's population. Saudi Arabia is also continuing a large-scale commercial port building and expansion programme on both its coasts, envisaging, probably correctly, a steadily growing volume of imports and unwilling to be caught out again. Other states have been more modest in their developments, but almost all the

new berths were commissioned before the full effects of containerisation had become clear, and perhaps with insufficiently ruthless analysis of what the imports of small states like the UAE are to be, once they have created their basic infrastructure. Congestion had been defeated before much new capacity had come into use. One firm of consultants has concluded that not only will the UAE have 70 per cent surplus port capacity by 1982, but that it will also have 60 per cent surplus container handling capacity by the same year because of the duplication of facilities.

Saudi Arabia has also been criticised for underestimating the effects of containerisation, although it should be remembered that economic projections are an inexact science. What is clear, however, is that the two biggest economies of the region, Saudi Arabia and Iran, are determined to have more than enough port capacity of their own, which narrows the opportunity for UAE ports to function as transit centres for the region. But the fierce competition which is certain to occur should make the new breed of Arab ports not just among the best equipped in the world but also, some of the most tightly run.

The Suez Canal is the main artery of maritime transport in the eastern part of the Arab world, and its reopening in June, 1975, not only made the development of Arabia rather easier (although it initially added enormously to congestion) but has been a vital prop

to the Egyptian economy. Traffic is now climbing rapidly back to the record level achieved in 1966, before its closure and the first stage of a project to enlarge it to win part of the super-tanker traffic is on schedule for completion in 1980. So far the success of the Canal's reopening has confounded sceptics who thought that the waterway had had its day.

Apart from the canal, the other specifically Arab contribution to maritime transport is the fast growth of the Arab shipping fleet. Currently the Arab states are trying to corner the market for the transport of their gas products. However, in the crude oil transport business it has not proved possible for Arab-owned ships—including those of the nine-nation Arab Maritime Petroleum Transport Company (AMPTC)—to create a special place for themselves in the market, and the bulk of Arab oil is carried in non-Arab ships.

## Increase

The enormous increase in air traffic to the Arab world—there was a 17 per cent rise last year alone, with more than 15m passengers being carried—has naturally put heavy pressure on airlines and airports. The carriers of the oil states have greatly expanded their fleets to carry their full share of the traffic to and from the region, with Saudia, the national airline of Saudi Arabia, now the Arab world's biggest with more than 50 jets, including Boeing 747s and Lockheed Tri-Stars.

Yet the facilities on the ground rarely match those in the air, with several major airports—Jeddah and Dubai, for example—being insufferably crowded, while the UAE has several international airports either complete or under construction which either are already or will become under-utilised. But in many centres major efforts have been made to speed up the handling of air freight, which is now swiftly cleared.

A colossal new airport is being built at Jeddah (its scale dictated partly by the need to cope with the annual pilgrim traffic to Mecca), and Saudi Arabia is notable for the number of smaller airports that are being built all over the country and connected to the main centres by frequent and fairly efficient services. In no other Arab country is the aeroplane being used on such a large scale to overcome the problems of distance and harsh terrain. Meanwhile, as a direct consequence of the allocation of discovered oil resources, other states, like Sudan, which badly need new airports and bigger airline fleets, must struggle on with run down facilities and inadequate equipment.

The need to move goods quickly into the Arab world has been one reason for the fast development of the road network; the other is simply the emphasis on building up an infrastructure. When the UAE was founded in 1971 there was no road linking the two main Emirates, Abu Dhabi and Dubai. Now it is possible to drive from

almost any part of the UAE and Oman to Europe with only a few miles of unmetalled surface—a road having been built along the inhospitable coast of Abu Dhabi to join the Saudi system. Saudi Arabia's road network is being improved and expanded quickly, but there is still no metalled road connection to North Yemen, while South Yemen is also isolated by a metalled road from Saudi Arabia. New roads are spreading across Libya and the Maghreb, while a road network is being laboriously stitched together in Sudan, which should next year have its first metalled link between the capital Khartoum and the Red Sea.

The lack of a working inter-Arab railway system stretching down into the Arabian peninsula, as well as the problems of the connections between Turkish, Syrian and Iraqi railways, meant that railways played little part in relieving port congestion in 1975 and 1976. But Syria and Iraq are strengthening their internal rail networks to a high standard, and there are plans to reopen the Hejaz railway from Amman to Medina in Saudi Arabia and link it to a new trans-Arabian network which would replace the existing under-utilised line between Dammam and Riyadh.

Except in Egypt and Sudan, Arab railways concentrate little on passengers. An important part of the transport revolution of the past five years is the enormous, if hard to quantify, increase in car and vehicle ownership in the Arab world, with the oil wealth making it possible for many more people

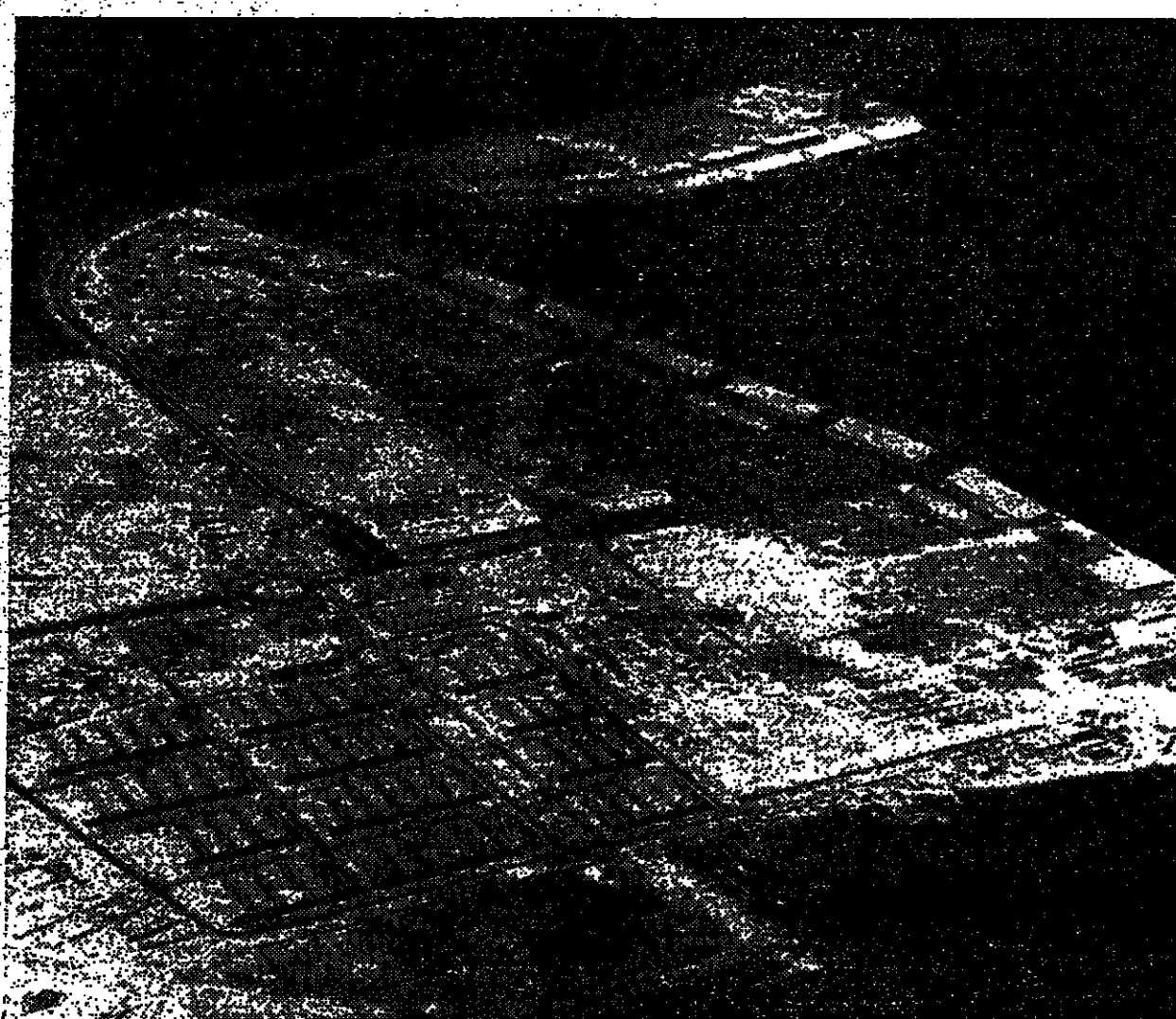
to own cars and for small entrepreneurs to buy taxis, pick ups, mini-buses and lorries for carting people within and between towns. The majority of the vehicles are Japanese, at least in the eastern part of the Arab world.

In almost every field of transport in the Arab world there is one or more multilateral body to promote co-ordination between states—in such fields as aviation shipping, port management in the Gulf, etc. There are also several multilateral companies, including the AMPTC and other joint ventures in shipping; Gulf Air, owned by four Gulf states; and the proposed co-ordination of Arab airlines on a route to the U.S.

## Obvious

The multilateral organisations function with varying degrees of effectiveness, but the absence of co-operation and co-ordination in the region is often more obvious. The recent political reconciliation of Syria and Iraq has ended a period lasting several years during which at different times the pipeline taking Iraqi crude across Syria to the Mediterranean has been closed; rail links between Turkey and Iraq across Syria have been cut; air services by national airlines have been halted; postal services disrupted; and even road borders closed. The two countries involved have been the main losers, but other users of transit routes have been affected, and it has been clearly demonstrated that transit routes anywhere have limited security. The current problems between North and South Yemen prevent the line of port of Aden being used to supplement North Yemen's more meagre ports. Duplications of port facilities in the Gulf has already been discussed. Civil war in Lebanon has put the port of Beirut out of action.

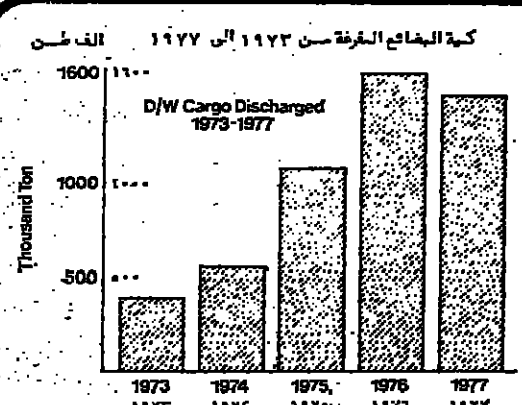
At the back of these and other apparent transgressions against the creed of Arab unity is the fact that most Arab countries see the creation of modern nation States within often illogical borders as their first priority. Despite trade in foodstuffs and petroleum products, Arab States are not heavily economically interdependent in terms of trade. The bulk of their commercial dealings are with the developed world. Better co-ordination of transport should come with greater economic integration.

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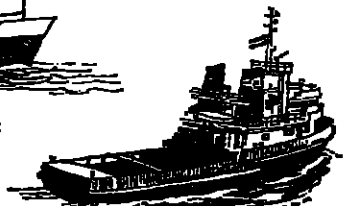
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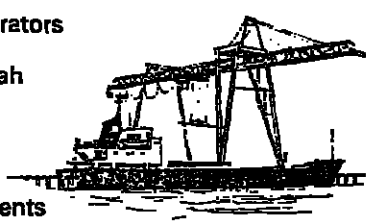


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## Red Sea and Gulf ports

James Buxton

[illegible]



## Shipowners

## Fleet in trouble

THIS YEAR has been one of consolidation for the Arab fleet as shipowners have dealt with the consequences of decisions made for the most part before the gravity of the shipping industry recession became apparent.

New vessels ordered pre-recession continue to be delivered, resulting in continued steady growth of the Arab fleet at a time when a number of the established maritime countries are seeing their fleets shrink.

Even so, the Arab fleet still only represents 2 per cent of the world's tonnage at a time when the Arab states are generating 60 per cent of world oil traffic and 30 per cent of total seaborne trade, measured by volume.

This leaves a large gap between the aspirations of the Arab countries as reflected in the United Nations code on liner shipping, which suggests that all countries should carry 40 per cent of their own seaborne trade. Recently, the secretariat of the shipping division of the UN Conference on Trade and Development has proposed applying this principle to bulk-including tanker—shipping. This move, fraught with

practical difficulties over implementation, should generate a good deal of heat when UNCTAD convenes again in Manila next May.

Most Arab shipowners have, however, long since ceased to rely upon political forces to win them commercial success. All oil continues to be traded on an ad hoc basis, leaving little room for the effective implementation of cargo reservation for national tanker fleets.

Other preferential methods, such as offering Arab ships cheaper fuel, have been tried and failed for a variety of reasons, ranging from abuses of the system to the difficulties of distinguishing between pure Arab operations and Arab-flag ventures in which there are substantial shareholdings in the developed world.

The latest test for the proponents of cargo preference is the allocation of contracts for the carriage of liquid petroleum gas from Kuwait, initially, and later in Saudi Arabia and Abu Dhabi.

The first stage of Kuwait's gas project is due to come on stream early next year, about one year late, by which time Kuwait Oil

Company (49 per cent Government owned) will have two (70,000 cubic metres) LPG carriers available and two more on the way. In addition, the Kuwait-based Arab Maritime Petroleum Transport Company, owned by nine Arab states, will have one 75,000 cubic metre LPG ship and a second due at the end of 1979.

The Kuwait Government has already agreed to a preference clause granting its own flagged ships (the first AMPTC ship will fly the Kuwait flag, the second that of Saudi Arabia) a 40 per cent share in gas export movements. With 2.8m tonnes of gas per year expected from the first stage of the gas project, this share will be covered as soon as the LPG ships now under construction become available. The contract also states that the Kuwait LPG ships will be fixed at the going market rate. At full flow, the gas project will involve exports of 5m tonnes per year.

Although gas, whether LPG or liquefied natural gas (LNG) is small business compared with crude oil, it gives the Arabs an important opportunity to plan the growth of their fleet in line

with the growth in production and relatively free, at this stage, from the enormous pressures of oil company fleet.

By 1985, the Middle East should have more than quadrupled its LPG exports to around 30m tonnes and it will be interesting to see whether the exporting states will succeed in fully employing their own tonnage at the expense of ships owned by independent owners during the next three years when this type of vessel will still be in heavy oversupply. Algeria, the country with most experience in gas shipping, is confident that it will be lifting half its seaborne gas exports in its own ships by the mid-1980s.

This is very bad news indeed for the large, established shipping companies, like P and O of Britain, which invested heavily on a speculative basis in gas ships. These companies can only hope that the Arabs will be as unsuccessful in cornering the gas market as they have in cornering the crude oil shipping market.

Arab owners have been bitten badly by entering the oil tanker industry with ships bought at boom prices and trading in slump conditions until the recent and no doubt temporary fillip in the market. AMPTC lost \$22.5m last year on operating income of \$20.8m and although the balance sheet continues to benefit from interest on short-term deposits, the company's financial position is serious.

AMPTC's shareholders recently agreed to set aside \$80m in the next five years in the form of a soft loan to help it through a continuing cash crisis and plans to expand the fleet, notably on the petroleum product tanker side, have been scrapped.

## Regret

There is some regret among AMPTC officials about this barrier against expansion as there is little doubt that second-hand ship prices have bottomed out this year without any significant purchasing by Arab sources. Kuwait Oil Tanker, which also lost money last year, is similarly restrained from expansion, although the fleet managed by this company should increase now that the Kuwait National Petroleum Company has at last started its purchasing programme for eight products tankers. AMPTC, however, is bidding for a share in managing these ships.

The only other activity in the Arab tanker fleet in the last year has been the creation of a few more joint ventures, some involving oil companies, with Saudi Arabia the most favoured partner.

It is still impossible to gauge how important these companies could become when trading conditions improve, but for the present they range from paper outfits with no ships to holding companies which have taken over vessels, usually old, from

## THE ARAB FLEET AT JULY 1978

	Tankers	Gen. cargo	Gas carriers	Bulk carriers	Total
	no.	grt	no.	grt	no.
Kuwait	17	1.2m	89	897,000	109
Iraq	29	1.1m	15	81,000	44
Saudi Arabia	47	1m	43	106,000	92
Algeria	22	643,000	38	175,000	60
Libya	16*	799,000	19	40,000	35
Egypt	29	131,000	70	220,000	99
Morocco	14*	158,000	32	91,000	51
Lebanon	2*	23,000	173	234,000	175
Others	21	196,000	132	225,000	158
Totals	197	5.4m	571	2m	792

\* Includes one chemical tanker. † Includes seven chemical tankers. ‡ Includes residual flag of convenience vessels. Source: Lloyd's Register of Shipping.

the developed world member of the joint venture.

On the dry cargo side, the United Arab Shipping Company continues to set the pace. With 58 ships aggregating more than 1m dwt, this organisation, owned by six Gulf Governments, has emerged as a significant force in world liner shipping. It recently reported a net profit of \$38m for its first 18 months of trading to last December—a creditworthy performance given deteriorating conditions in the Middle East liner trades since the middle of last year.

UASC appears to have happily combined the benefits of the financial muscle of its shareholders and its advantages of access to Gulf cargoes with a tough commercial nose and an ability to survive the political tensions of the Arab world, which some see as the most severe handicap of the more broadly based AMPTC.

There is also a large number of joint ventures between smaller groups of Arab States, such as the Algerian-Libyan Caltram, and the Alexandria-based Pan Arab Shipping and Fanco, which involve the Arab League and Egypt, Syria and Libya respectively.

One very large but ageing fleet, that of the State-owned Egyptian Navigation Company, has also attracted attention recently with negotiations with world shipyards about, it was reported at one time, a programme for up to 60 new ships. This never looked a very realistic proposition, given Egypt's appalling economic difficulties, and the word from Cairo now is that the modified five-year plan will provide for the purchase of just enough vessels to keep the fleet ticking over, that is four multi-purpose ships of 13,000 dwt and two bulk carriers of 35,000 dwt and two car ferries.

Longer term expansion is still the subject of study and is closely linked to forecasts of an increase in imports from 7m tonnes to 11m in 1980, of which Egypt aims to carry 40 per cent in its own ships. At present, its share of its own seaborne trade is well under 25 per cent.

The other aspect of Egyptian maritime policy is the stimulation of private sector shipping and joint ventures, of which 10 have been formed since the formation of President Sadat's "open door" economic policy. Of these five are operational.

Another important point for Egypt, which because of its long maritime tradition and large reserve of skilled manpower has an advantage over the wealthy Gulf states, is the need to improve port facilities. A long overdue specialised container berth for Alexandria should be approved next year, Government officials say.

On a wider front, the Arab Centre for Co-ordination and Maritime Consultation, based in Kuwait but run by Iraq, has continued its efforts to promote the formulation of Arab maritime law, working towards an Arab classification society and the establishment of a protection and indemnity club for the Arab fleet.

Talks are said to be nearing conclusion with London insurance interests on this last subject. A three-year project is envisaged to take the Arab fleet to a fully independent P and I club. Meanwhile on the widest possible front, the centre is still working on a study of the unification of the Arab fleet—still the goal of a number of influential figures in the Arab maritime and industrial world.

Ian Hargreaves

## Shipping

## The recession continues

THE MIDDLE EAST shipping trades after a glorious, for the operators, three-year bonanza are now well and truly back in line with the world shipping recessions.

Rates slumped during the second half of last year by an average of more than one third and for the specialist roll-on roll-off ships which made the biggest killing during the boom because of their ability to beat port congestion, the collapse has been even more severe.

By the end of 1977, the industry was consoling itself with the prediction that after three good years, a sharp shake-out was now inevitable, but that by the end of 1978, things should be looking better.

This has not happened, at least not yet. Certainly, there have been bankruptcies among even quite large lines and a large number of smaller, charter-only operators have departed. There has also been a steady stream of announced rationalisations of service schedules and of lines joining together to reduce tonnage on the routes.

But, in spite of brief fluctuations during the year, there has not been the sustained improvement which most companies had hoped for by now. Some take the view that the gap is now primarily psychological—a lack of confidence among shipping lines that they possess the market power to drive rates up by 20 or 30 per cent—others say that the shake-out and the rationalisation have still not gone far enough.

The basic problem is that the world shipping recession, now approaching its fifth year, is still progressively eroding the financial strength of most, though not all, European, Japanese and U.S. shipping lines.

The traditional large, diversified shipping companies are under severe pressure on tanker and bulk ship operations and the feeling is that withdrawal from one of the few areas where at least modest trade growth is in prospect is unthinkable. Also depressed charter rates for ships continues to make it easy and profitable for small operators to enter the Middle East or indeed any other trades.

What the established companies have tried, with some success, to do, is to increase the specialisation of their operations, identifying specific cargo flows and concentrating on heavy lift ships, for example, and by seeking joint venture arrangements with Arab-flag companies which in the medium term undoubtedly represent a serious challenge to the older shipping lines.

Matters are not helped by the fact that the conferences in the Middle East liner trades, having broken under the strain of outsider lines piling in during the boom, have been unable to restore order now that the boom is past. A lot of energy has been spent in the last year on mini-conference activities, with groups of lines seeking to protect their own interests by gentlemen's agreements on minimum rates, but their success has been limited.

Even if these structural problems of the routes can be sorted out, shipowners face difficult business decisions about the best type of ship and service schedules in trades which although calm compared with

## PROJECTED TRAFFIC AND CAPACITY AT MIDDLE EAST PORTS

Type of traffic/berth	1977	1979	1983
Conventional:			
Traffic	46.3	41	40
Capacity, high	41	53	92
Capacity, low	—	32	56
Container/ro-ro:			
Traffic	4.5	10	19
Capacity	4	19	35
Total:			
Traffic	51.3	51	59
Capacity, high	45	72	127
Capacity, low	—	51	91

Source: H. P. Drewry.

the volatility of two years ago—of service frequency, still involve a high degree of unpredictability.

Although trade into most of the Arab countries is expected to continue steady growth in the next few years, the rates of growth predicted vary considerably.

Even more varied are the predictions of what proportion of the seaborne trade will be utilised and what proportion of the utilised cargo will be moved in pure lift-on lift-off containers and how much by trailer-borne ro-ro services.

Last year, around 85 per cent of all general cargo into the Middle East was still being moved in conventional breakbulk style, but with container handling facilities sprouting up in ports throughout the region, the trend towards more boxed goods is now unstoppable.

## Leading

Some forecasters suggest by 1982 as much as 80 per cent of all cargo into Arab ports could be containerised. Saudi Arabia is leading the way, with Jeddah alone expected to handle well over 300,000 20-ft box units this year, making it the 25th largest container port in the world, according to Containerisation International. Three years ago it was not even in the league table.

Existing port plans in the region, especially in the Gulf, already guarantee substantial overcapacity of gantry cranes for container handling at Arab ports by the end of next year. All of this should improve the economics of containerisation from the shipowner's and the shipper's point of view.

According to a recent study of Middle East liner trades by H. P. Drewry (July 1978, price £75) under equal conditions, the cost per ton of sending goods from a quay in NW Europe to a quay in the Gulf is least with the 1400 TEU, gearless container ship. Taking the index for this vessel at 100, a modern breakbulk liner comes out at 136, the same ship at 129 when carrying a mix of breakbulk and containers and a roll-on roll-off ferry at between 145 and 221. The large, modern ro-ro ship is, however, competitive with a mixed cargo of trailers and containers.

This, of course, is very theoretical and if it were as simple as that shipowners would not be studying as long and hard as they are now about optimum design and configuration of tonnage. In practice, considera-

Saudia was the first airline to order the most powerful version of the Rolls-Royce RB 211 engine the 524. It powers the airline's Lockheed TriStar-200 airliners. Saudia recently ordered three more of these, bringing its TriStar fleet to 13 aircraft.

Other major airlines have also chosen the RB 211-524 engine, which is certificated at 50,000 lb take-off thrust. It powers long-range Boeing 747s ordered by British Airways and Cathay Pacific, as well as Saudi Arabia's Boeing 747 SP.

Long-range TriStar-500s with RB 211 engines have also been ordered by three operators—British Airways, Delta Air Lines and Pan American World Airways.

Pan Am's order is for 26 aircraft including options—a major success for Lockheed and Rolls-Royce. Saudia experience with the RB 211-524 was an important factor in the Pan Am decision.

Speaking about the airline's RB 211 engines Capt Ahmed Matar, Saudia's Deputy Director General (Operations) says: "We have been very pleased with the performance and reliability of the RB 211 engine in our TriStar-200 airliners. And it is very pleasing that Saudia's decision to place the first order for the RB 211-524 has been followed by orders from so many of the world's leading airlines."

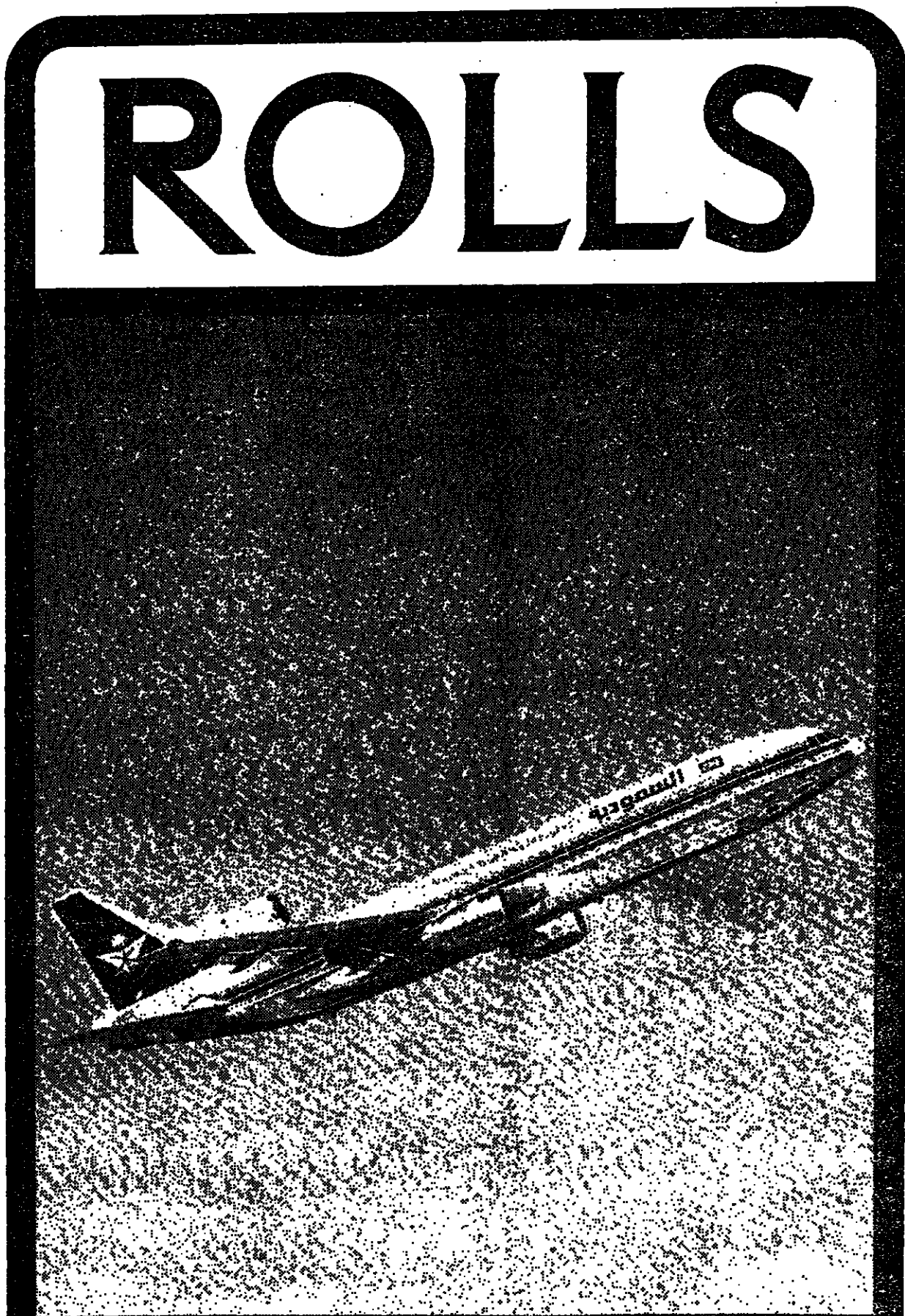
The RB 211 family of engines is being extended further, with planned thrust growth to 55,000 lb. Work is also under way on a lower-thrust version, the 32,000 lb thrust RB 211-535. It is designed for new medium-sized airliners which will enter service in the 1980s.

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## ARAB TRANSPORT IV

## Railways in North Africa

## A rare phenomenon

ASK YOUR average man in the khasha the way to the station, and you may get the same puzzled frown as would greet the brow of citizens in Detroit, Sao Paulo and Auckland.

For the passenger train is a rare phenomenon in most Arab countries, thanks to thinly-scattered populations and a laissez faire attitude towards safety and environmental nuisance on the roads. This is less true in the Nile valley, perhaps, than in the oil-rich countries around the Arabian Gulf, but even here the passenger train has a poor public image.

Yet the 1970s have seen a remarkable upsurge in rail expansion and investment which shows no sign of abating. Indeed, some very large construction projects, each involving several hundred miles of route,

will be up for grabs in the next two years.

Libya is pushing ahead with studies embracing 750 miles of route, while Algeria has Canadian Pacific Railway engineers surveying a line stretching deep into the Sahara almost 1,000 miles from the Mediterranean coast. Other plans, less well defined at this stage, would see Egypt linked to the Sudan and a new line from the Nile to the Red Sea.

All these schemes have one thing in common: they are geared to a rapidly rising demand for bulk freight to be moved in large tonnages over long distances through inhospitable country. Gone are the days of lightly-laid development railways thrown down as quickly as possible for reasons that were political and military as much as economic.

Indeed, in parallel with the construction of new lines, re-

placement of tracks laid in the early years of the century is in prospect—often on a completely new alignment to ease curves and gradients so as to cut the cost per ton-mile in terms of fuel and motive power required. In some cases, such as Algeria and Tunisia, lines laid to the narrow 1,000mm gauge will be replaced with standard (1,435mm) gauge tracks, partly so as to unify national networks but also to permit more economic operation with heavier trains.

Egypt and Sudan, each with nearly 3,000 miles of railway, are the largest and most important networks, although Algeria is not far behind with 2,400 miles. Unfortunately, geography as well as differences of gauge and politics currently limit international rail traffic to minor flows between the Maghreb countries of Morocco, Algeria and Tunisia.

Sudan uses the 1,067mm gauge favoured by British military engineers, who built the first line. This has not been a major handicap up to now, but it will become so on completion of the 310 mile link now being surveyed to connect Egypt's southern railhead at Aswan with Wadi Halfa in Sudan, for Egypt is standard gauge.

This is only one of several new lines planned or under construction in Egypt, although most of the considerable funds allocated to railways are going into modernisation—particularly signalling to increase line capacity. Iron ore is the attraction at the Bahariya Oasis, to which point a 200 mile line has recently been completed from steelworks at Helwan in the southern suburbs of Cairo.

Last year three new lines were announced: two are relatively short, but the third is 370 miles long connecting Qena on the Nile with the Red Sea at Safage. Here the prize is phosphates.

Government in October to design a 127 mile coastal line from Tripoli to Misratah. Here it will join a 500-mile line surveyed by Yugoslav consultants to bring iron ore from Brach and Sabah in the south to a new steelworks complex near Misratah.

All this activity next door has caused the Tunisian National Railways to look again at its lightly-laid 1000mm gauge network south of Tunis. The plan is to convert the coastal line to 1435mm gauge, ultimately providing a standard-gauge route from Morocco right through into Libya.

Phosphates also provide an incentive to improve rail communications between mines inland and the processing plant at Gabes on the coast, but it is not clear how a relatively poor country like Tunisia is to finance the gauge standardisation needed to unify its northern and southern networks. The Libyans have offered to fund the standard gauge line to Tunis so as to connect up with their own network, but this still leaves about 700 miles of 1000mm gauge route to be dealt with.

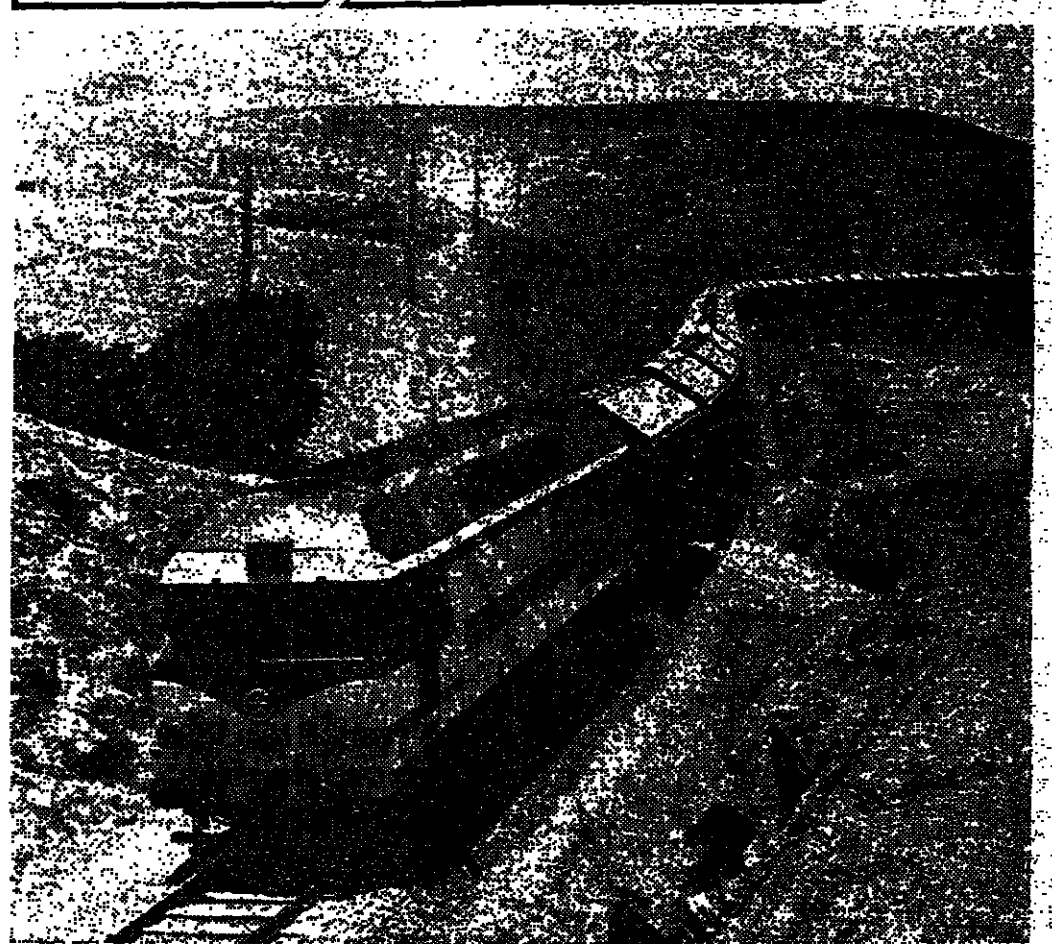
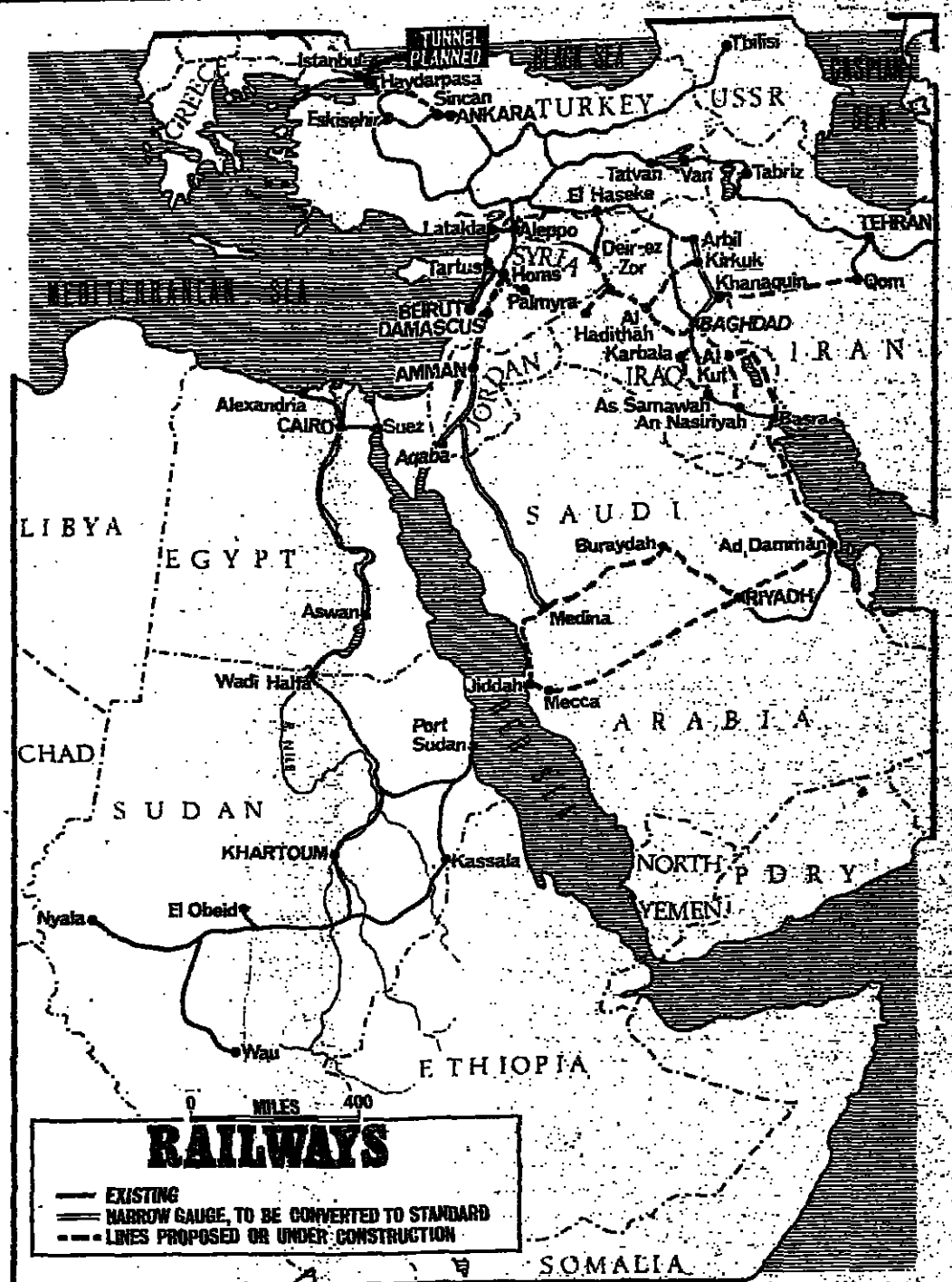
Algeria and Morocco both have well-developed rail networks with ambitious plans to extend southwards into the desert. Steel and phosphates again provide the incentive.

Algeria's industrial development is concentrated in the north-east, where a new line is planned from Tebessa to Ouled-Rhamoun—in part replacing a narrow-gauge route. But the really major task in view is a new line nearly 1000 miles long reaching out to Gara Djebilet in the far west, where there are phosphate deposits close to the disputed borders with Mauritania and Morocco.

Phosphates provide the incentive for several major projects involving electrification, track doubling and new lines within Morocco, but even in 1978 rail still has a role to play in international politics. Having recently taken over a substantial chunk of the former Spanish Sahara by occupation, Morocco now plans to lay track 400 miles south of the present terminus at Marrakech to reach Laayoun, thus securing an economic grip on assets which both Algeria and Mauritania would like to acquire.

Economic analysis may abort this ambitious project, but the spirit of Berlin-Baghdad and Cairo-to-the-Cape still lingers. Indeed at the African Union of Railways Congress in Abidjan last August, there was a call for a north-south Trans-Sahara link, no less!

I.H.



A phosphate train in Morocco. More railways are to be built as new mineral deposits are tapped.

## Railways in Arab Asia

## Playing a bigger part

RESTORATION of rail services between Syria and Iraq—one tangible result of last month's reconciliation between the two states—has brought relief to Turkish State Railways, to western shippers who had been obliged to send cargoes to Basra via the Gulf and not least to Iraqi Republic Railways (IRR).

Syria closed the border crossing unilaterally on November 18 last year, thus cutting the rail link between Turkey and Iraq which crosses Syria. Since then, by agreement with the Turkish Government, IRR had been sending fleets of heavy lorries to the Turkish border at Nusaybin to pick up consignments from Europe and Turkey. IRR's president, Mr. Khalid Abdul Halim, told me earlier this year: "It is inconvenient, and it is costly, but it works."

Revival of rail traffic and renewal of political accord could lead the governments of Syria and Iraq to look again at a project which had been put into cold storage: the construction of a second rail link between the two countries further south, at Abou-Kamal.

The new line would run down the Deir-es-Zor, on the existing Syrian line from Aleppo to Kamishli. On the Iraqi side, the connection would run up from Baghdad to Husaibah, and then directly on to the border with Syria.

Iraq has already decided to build the 404km line to Husaibah, with a 155km branch line to Akashat. A \$1.2bn contract for the construction of the line was awarded to the Brazilian company Mendes Junior International last month. Work is to begin next year. Payment will be 75 per cent in U.S. dollars and 25 per cent in Iraqi

dinars. In spite of the problems of financing the work, the Iraqi Government has little choice but to move fast on this project. Akashat is at the centre of huge phosphate deposits, and a major fertiliser complex is nearing completion at Al-Qaim, near Husaibah.

If this investment is not to be written off, then adequate transport facilities will have to be provided relatively quickly to haul rock phosphate from Akashat, and to distribute the fertilizer.

The need to exploit existing mineral deposits is a major factor in the current state of railway construction—and plans for railway construction—throughout the Arab world.

Iraq itself has plans for several other standard-gauge lines. British consultant Henderson Hughes and Bushy has completed a study for a 700 km line from Baghdad to Um Qasr, with a branch line from Kut to Margil. And preliminary studies for a 420 km line from Baghdad to Erbil, via Kirkuk, have been made by Trevor Crocker and Partners, in association with Transmark and Maxwell Stamp Associates.

## Higher

The new line to Husaibah is likely to be built to much higher standards than any existing Middle East railways. It will have a design speed of 250 kph, minimum curve radius of 3,600 m and a maximum gradient of 0.5 per cent. Maximum axle load will be 24 tonnes.

Concrete sleepers for the line are likely to be supplied from a new factory on the outskirts of Baghdad. Designed and built by Dow-Mac, it was opened in

May this year.

In Syria, too, the main weight of transport investment for the next ten years will be on railways. When the state was created it had four isolated stretches of railway which joined up through Lebanon or Turkey. A new line was built linking Aleppo with Latakia, while Tartous was reconnected to Homs. The Latakia line was then extended eastwards to Kamishli, giving Syria a direct link to Iraq without passing through Turkey.

Now two new routes are being built with Soviet assistance. One from Homs through Mebine to Damascus will provide the first direct rail link between Aleppo and the capital (the existing line runs partly through Lebanon). The other will run from Mebine north-west to Palmyra, where there are phosphate deposits. Also under study is a 90 km Mediterranean coastal route linking Tartous, Banias, Jabla and Latakia.

The Beirut-Damascus line has been wrecked in the civil war in Lebanon and its reconstruction is unlikely.

Although railways have so far played only a minor part in Saudi Arabia's transport pattern, there are signs that this may change over the next decade.

Earlier this year an Italian company was commissioned to design a new high-speed line between the port of Dammam and Riyadh, the Saudi capital. Construction of a line to take passenger trains at speeds up to 200 km/h would speed up communication between the two cities and leave the existing 580 km single-track line free for goods traffic.

But even with this in mind, the Saudi Government Railroad

Organisation is spending heavily on upgrading the existing track. Next year, for example, more than \$48m will be spent on renewing 245 km of track. And British consultants Atkins Henderson have a contract to provide a feasibility study and design for a 100 km line from Dammam to the Jubail industrial zone. The study will also provide for a rail link to the proposed Eastern Province airport.

Reconstruction of the pilgrim Hajaz Railway from Jordan to Medina in Saudi Arabia is a project which has been begun and dropped several times in the past 20 years.

An attempt to restore the line ten years ago faltered and

was finally abandoned when pilgrims to Mecca used the unfinished railbed as a new desert road. Now bids from eight countries are being considered in one more attempt to rebuild the line which T.E. Lawrence destroyed in the first world war.

In Jordan itself a major track upgrading project is to begin soon. The aim: to make the route north of El Hass suitable for hauling heavy loads of phosphate rock from the deposits at Menzil. The 125 km line from Menzil north to Amman is also to be upgraded.

John Levett

Editor, International Railway Journal

## SUEZ CANAL AUTHORITY

## FUTURE PROSPECTS OF THE SUEZ CANAL

- The Suez Canal is the shortest navigable route between the Eastern and Western hemispheres.
- It saves from 17% to 60% in distance between East and West and from 50% to 76% fuel.
- The closure of the Canal led to a loss of 1,700 million dollars annually for the world.
- Resumption of traffic in the Canal led to a surplus for shipping companies amounting to 1,600 million dollars annually.
- Length of the Canal: 173 kms.—Breadth between buoys: 110 m. Maximum permissible draught: 33 ft.
- Best Canal for easy and safe traffic, and it is liable to be widened and deepened when required.

## Transit of ships:

- Ships transit the Canal in three convoys daily: two from Port-Said in the North and one from Suez in the South.
- Piloting of ships is compulsory and four pilots are successively credited with piloting each ship from the first light buoy of the entry port till the light buoy of the exit port.
- Ships up to 60 thousand tons are allowed to transit the Canal fully loaded and up to 250 thousand tons in ballast according to their draught.

## Evolution of Traffic in the Canal

Period	Number of vessels	Daily average	Tonnage million tons	Daily average 000 tons	Revenue million dollars
1975	5,640	28.7	50,441	240.3	106
1976	16,994	46.5	157,759	513	382
1977	20,125	55.1	220,477	604	466
Till end of October 1978	17,794	58.5	206,597	679.6	445
Total	60,553		665,274		1,399

## Suez Canal Development Project:

First Stage aims at allowing tankers up to 150 thousand tons to transit fully loaded and up to 300 thousand tons in ballast. Execution started in November, 1973, and the following has been accomplished.

- 92% of earth removing works: volume of work being 88 million cubic metres.
- 83% of decantation basins: volume of work being 11 million cubic metres.
- 66% of building new revetments: volume of work 141 kilometres.
- 63% of removing old revetments: volume of work 131 kilometres.
- 39% of dredging works: volume of work 559 million cubic metres.
- Cost of the first stage being 1,200 million dollars and it will be accomplished by mid 1980.
- Work is being carried out in 133 working sites by 10,000 workmen both Egyptians and foreigners belonging to 27 Egyptian and foreign companies.
- Following execution of this stage, Canal annual revenue is expected to reach 800 million dollars.

Second Stage aims at allowing tankers up to 260,000 tons to transit fully loaded and bigger units in ballast. Its execution starts after accomplishment of the first stage and takes three years and costs 1,000 million dollars.

Following its execution, Canal annual revenues will reach 1,200 million dollars.

## Auxiliary Services:

- Number of S.C.A. pilots being 289.
- Number of S.C.A. tugs being 26 of a capacity varying between 1,600 h.p. and 6,400 h.p.
- Number of S.C.A. dredgers being 14 of a capacity varying between 200 cubic metres/hour and 1,800 cubic metres/hour.
- Number of signal stations being 11 along the waterway.

## Electronic ship Traffic Management:

The Authority contracted with the American "Cutter Hammer" group of companies for the establishment of an electronic ship traffic management system in the Canal. It includes T.V. screens, radar stations and a "lauran C" communications net. The project is scheduled to be accomplished by the beginning of 1980.

## S.C.A. Research Centre

It is located in Ismailia wherein studies are conducted in its various laboratories for developing the Canal and for the protection of coasts and breakwaters.

## S.C.A. Two Shipyards:

The first, in Port Said, where vessels up to 12,000 tons are built. It acquires a floating dock and a dry dock where vessels and different floating craft are being repaired. A plan costing 80 million dollars is now underway for its development.

The second, in Suez, where small floating craft are built and vessels operating in the Gulf of Suez are being repaired. A plan costing 15 million dollars is now being carried out for its modernisation.

## S.C.A. Affiliated Companies:

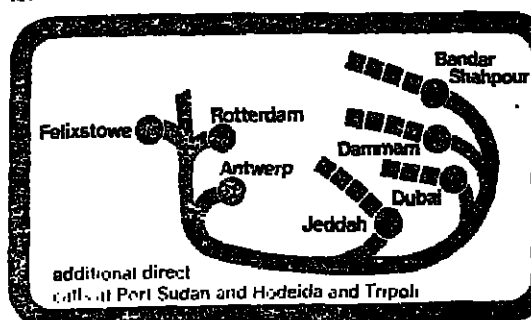
They are seven companies with different activities extending services to transiting vessels and to marine circles in the Middle East.

They embarked on creating joint ventures with foreign companies with capital estimated at 4 million dollars. A plan costing 35 million dollars for their development is well underway.



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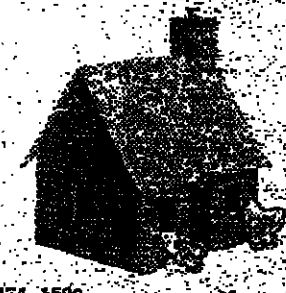
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## ARAB TRANSPORT V

## Road construction

## Still a major priority

VAST AMOUNTS of capital have been employed throughout the Arab world since 1973 in improving domestic and international road links. For most economies in the Middle East, the development and upgrading of poor or non-existent infrastructure has been the number one priority and roads have been top of the list. Their efforts are now paying off.

Forecasts of the future volume of road freight traffic throughout the region fluctuate as attempts are made to assess the impact on transport requirements of the new generation of air links and port developments. But most Middle East countries continue to press on with ambitious plans to improve their internal road network and the standard of communications with neighbouring nations.

Several countries can already claim to have made substantial improvements to their highway networks and the nature of the terrain and scale of distances often involved has provided civil engineers with some daunting challenges.

The results of their endeavours have, however, been dramatic, with domestic routes taking shape, overland haulage links between the Middle East

and Europe rapidly improving and connections in the other direction, to Asia, also in the process of being raised to twentieth century standards.

Many of the routes now being constructed run across some of the most difficult and inhospitable regions on earth, a factor which has not necessarily prevented road links from being established and maintained in the past but one which has made the transport of goods a costly, difficult, time-consuming and often dangerous exercise.

## Tested

Extreme weather conditions have tested civil engineering teams and construction techniques to the limit and the huge mobilisation programmes involved have placed at least some contracts in jeopardy. Road builders have in most cases been forced to supply all their own plant and equipment and to organise the transportation of basic road making materials from wherever they have been available.

Perhaps a major compensation has been the speed with which projects can progress once routes have been settled and contracts signed, with few

of the delays which invariably arise when a road scheme is being carried out in a more densely developed and heavily populated area.

Road contractors working in the Gulf are drawn from Europe—notably from Britain, Greece, West Germany and Italy—and from the Far East, including Taiwan and South Korea. They are engaged on schemes which range from the provision of relief roads for urban centres now generating volumes of local traffic unthought of a decade ago to 1,000 km stretches of motorway designed to link two previously unconnected areas and help stimulated economic development in previously dormant regions.

One of the major projects involves the construction of the trans-Saharan highway, running nearly 800 km from Algiers through the desert via In Salah and Tamanrasset to Niger, with a branch to Mali. The first section opened in 1973 and the route, which will revolutionise transport to west and central Africa, is due soon to become fully operational.

By contrast, a much shorter though equally challenging and significant project involves the construction of just 25 km of

road in the shape of a causeway linking Bahrain to the east coast of Saudi Arabia.

The scheme, provisionally costed at over £400m, will be financed by the Saudis and will connect the Saudi road system from near Al Khobar across Umm an Nasan island to Bahrain. It is unlikely that contracts will be awarded yet and the earliest suggested completion date so far available is the mid-1980s. The scheme has become immersed in political debate centring on the effects of such a link on both countries, whose cultures and life-styles differ widely.

Among other Gulf nations, Saudi Arabia and Oman face the similar task of connecting large areas of inhospitable country and, despite their development programmes, will continue to rely heavily on unimproved routes.

In Saudi Arabia, no less than £2bn has been allocated for the current highway development plan, which involves extensive road networks throughout the country. By 1976, the country had 22,000 km of roads, though nearly one third of them were unimproved. A substantial proportion of the resources allocated will be devoted to raising the

standards of existing links while the development of new routes continues.

## Linked

Much of the Saudis' attention will be centred on improving links in their eastern province. The region is linked to the remainder of the nation and neighbouring countries by single carriageway roads north to the Trans-Arabian Pipeline, west to Riyadh and south via Hofuf and Salwa to the Qatar network. A new route is under construction which connects the TAP pipeline road to Hofuf and then south and further highway improvement work is being carried out on the Dharran-Riyadh road.

Elsewhere in the country a £130m scheme is under way to improve the route between Mazaleef and Majarda and contracts worth £185m are in hand to construct a highway between Jof and Qaliba. Work on the Mecca-Jizan road, valued at \$66m, is due for completion soon.

In Oman, which is investing over 30 per cent of its total budget in the provision of transportation infrastructure, progress has been rapid since 1970, when the country had just a

few kilometres of paved road.

By the end of 1976 over 1,500 km of road had been paved, however, with another 8,500 km graded. Work on new highway schemes in the near future is likely to be concentrated in the Dhofar region to the south where investment in roads will be linked to the development of government centres throughout the region.

Much of the road development in the neighbouring United Arab Emirates is completed, though the extension of the Abu Dhabi-Dubai-Sharjah dual carriageway to Ras al Khaimah means that a major route now provides a link along the whole coastal strip. Like the other smaller Gulf countries, such as Qatar, Bahrain and Kuwait, the UAE has been able to pave almost all its main road networks and is embarking on the upgrading of many of the existing routes to dual-carriageway standards.

With many major links throughout the Gulf yet to be connected up, older highways to be improved and maintenance programmes to be established, substantial expenditure on the region's roads is set to continue.

Michael Cassell

## Road haulage

## Long-term confidence

ROAD HAULAGE in and within the Arab world has never been an easy business, but with the collapse of shipping rates last year the economics of much international haulage activity to the region has been quite simply destroyed.

More than a year later, the trucking industry has had time to take stock of these maritime developments and to assess what its permanent role might be when, eventually, the swings of undersupply and oversupply in transport to the Middle East become less violent.

The chief certainty is the haulier's confidence in the basic supremacy of his mode when it comes to reliability and security of goods. There is no doubt that for some premium cargoes, customers will continue to be prepared to pay for direct overland services for this reason. But the big question governing the extent of this long-distance overland operation is how much extra the shipper will have to pay.

At the moment the gap is enormous. A loaded 40 ft container can be moved by sea from the north of the Continent to, say, Iraq for under \$4,000, which is well under half the overland rate for an equivalent size of trailer. Where the shipping line offers door-to-door service using either its own or subcontracted haulage in Europe and in the Gulf, the differential can be almost as great, because of the scale of competition holding down the shipping lines' intermodal tariffs.

It is difficult to predict when this ferocity of competition from sea transport, now unbattered from the port congestion problems which led to the overland boom in 1975-76, will lead to the 20 to 30 per

cent increase in shipping tariffs most operators to the Middle East believe are necessary.

Even assuming that this happens, hauliers face enormous difficulties. Although most of the surviving operators have learned to deal with the physical difficulties of bad roads, delays caused by unpredictable bureaucracy and scattered maintenance facilities, it has been less easy for them to offset the impact of transit taxes and competition from East European and especially Turkish hauliers.

## Taxes

Transit taxes, which began to emerge as a serious problem in 1974, have now reached epidemic proportions, spreading through Jordan, Syria, Saudi Arabia, Turkey, Yugoslavia and even into Austria.

They now account for 20 per cent of a lorry's costs on a run from Europe to the UAE, with taxes in excess of £1,000 a vehicle. Hauliers have also to face another range of financial penalties, such as the Turkish requirement to buy \$300 of local currency at the entry point, or the Iraq Government's insistence on a \$150,000 bank guarantee. They also have to cope with the continued shortage of transit permits in European countries—a shortage which results in many lorries making the journey from Germany to Yugoslavia on board a railway wagon.

These conditions have brought a long bowl of protest from the Geneva-based International Road Transport Union and some taxes, including the Austrian levy, have been reduced following EEC pressure. Some Governments have also had success in securing

bilateral deals to reduce taxes for vehicles from their own countries.

Even so, the IRU counted 350 vehicles a day in a census at the Turkish border point of Kapi-kule earlier this year and it is unlikely that the volume of traffic has fallen much since. Precise figures are difficult to obtain, but Iraq still relies on land transport for almost 10 per cent of its imports and Kuwait between 10 and 20 per cent. Direct overland transport to Saudi Arabia is now negligible because of distance and the excellence of utilised sea links and in the case of the United Arab Emirates, long-distance overland operations are excluded except in some cases of emergency by the lack of hard surface road to Qatar.

Roads are of course being improved and extended throughout the Arab world, but as these projects benefit hauliers, shipping lines are benefiting even more rapidly from the mushrooming of modern port facilities and purpose-built transshipment zones, such as Sharjah in the UAE.

Indeed it now seems certain that the predominant pattern for haulage in the future will be a restricted level of direct

trucking to Iraq, Syria, Jordan and, outside the Arab world, to Iran.

A much greater scale of activity will be the intermodal services offered either by the shipping lines with their own Arab-based fleets of trailers and lorries or by forwarders able to put together a shipping connection and local land transport. Some European transport companies have also accepted the advantages of employing local, especially Turkish, hauliers for their Middle East distribution, both in terms of competitive labour costs and the value of drivers' local knowledge in overcoming difficulties.

This is standard practice for the various operators serving Black Sea ports but some direct overland operators, such as the Dutch haulier Koops, use Turkish drivers for all their Middle East business. Turks are also exempted from Iraq's bank guarantee requirement.

Within Arab States, the development in the road haulage industry has followed closely the European pattern, with a handful of large companies operating more than 50 vehicles each and numerous small operators and owner-drivers. The position is somewhat different

in Iraq, where road transport has been nationalised.

The business is bound, however, to become increasingly specialised and capital-intensive, because of the growing pace of containerisation mixed with a continued requirement for heavy lift work associated with major capital projects. This should favour the bigger operators. Forecasting future balances between container, roll-on/roll-off and conventional break bulk traffic remains, however, a hazardous exercise.

Much also depends upon the outcome of what looks like being a highly competitive tussle between the revitalised ports in the Gulf and Red Sea, and of the future of Beirut, which was once an important road distribution point for the Eastern Mediterranean.

Will Kuwait's Shuwaikh container terminal, for example, be an attractive distribution point for Iraq? Will Sharjah take a leading transshipment role for the whole area between the Gulf and the Red Sea? It is too early to say, but transport businesses will be made and unmade according to the accuracy with which these trends are read. Rail competition, too, could well emerge as a more significant

force, penetrating through Turkey and the Soviet Union and fanning out through the Arab world's expanding rail network.

## Slower

For the North African Arab countries, the cycles have been less dramatic because of the slower pace of changes and because even a poor country like Egypt has relatively good roads. Attempts, however, to use Mediterranean ro-ro services and road transits through Algeria to serve Nigeria have not been conspicuously successful, with the recent bankruptcy of one of the few operators on this route. Completion of the trans-Saharan highway will clearly improve the possibilities, but probably not dramatically.

The unknowns greatly outnumber the knowns for long-distance haulage to the Arab world. Clearly, with Suez open and the ports working well, ships will continue to come out top on price but there is still a hard core of hauliers with hard-won experience in the trades who will provide permanent competition in the movement of perishable and premium goods.

I.H.

## Shipping agents

## Reducing the delays

NEARLY 50 shipping companies now provide conventional general cargo services to ports in the Gulf and Red Sea areas, and at mid-year a further 40 companies were operating container or roll-on/roll-off services. The routes involved to the Gulf and Red Sea range from Japan, Singapore, and India to the UK, the Continent and the U.S., and the total seaborne imports into the Gulf and Red Sea ports in 1977, exceeded 50m tonnes. If the commodities traditionally carried by tramp shipping are ignored, it is estimated that the total liner traffic in 1977 accounted for about 30m tonnes.

While it is correct to identify the continuing high level of imports into the area as the key factor in the very heavy traffic density, the work of the vital agency companies in the ports of the Gulf and Red Sea ensures that delays are reduced to a minimum.

For some agents the provision of a wide range of services is only the basic operation, and several Arab states have appointed companies to operate cargo terminals. The container terminal at the port of Khor Fakkan is the latest example of such an arrangement, where Marine Transport International has been awarded the contract to manage and operate the container port. M.T.I. already operates the container terminal at Jeddah.

Port Management Services, a wholly-owned subsidiary of Seatrain Lines of the U.S. has responsibility for overall management of Port Khalid and Khor Fakkan in the Emirate of Sharjah.

When the major projects for the large-scale development of Arab ports were introduced the construction companies were faced with the problem of moving vast quantities of material into position, and Gray Mackenzie, a member of the Inchcape Group and a major agency in the area, was able to supply a fleet of barges and tugs for moving the equipment from ship to site. Gray Mackenzie has also played an important part in the reorganisation of Port Rashid (at Dubai), where the company's management expertise made an important contribution to reducing congestion. The company is also involved in management services at the new port of Ras al Khaimah.

In Saudi Arabia at Damman the Gulf Port Management Services, a group which includes Scruttons of London and the Mersey Dock and Harbour Company, operates a consultancy management project in which Saudi trainees work alongside their British counterparts in the management role. This year Damman completes its 28th berth and expects to handle 28m dwt of cargo.

One of the leading agency companies operating in the Middle East is the Gulf Agency Company, with offices in five major ports in the Gulf area. GAC at Dubai operates a round-the-clock all weather service to ships entering or leaving the Gulf, the contact being made at any position along the 55th Meridian. The company's supply vessels are supplemented by the helicopter services, and in addition to arranging drydock-

ing and repair facilities GAC also organises heavy lifts.

Extensive facilities are provided by one of the most experienced agents in the Gulf, Yusuf Bin Ahmed Kano, where, in addition to the usual services, Kano maintains stocks for certain manufacturers for a number of items including paints, ropes, air compressors and electric generating sets. Kano is an associate company of the International Paint Company, which manufactures, supplies and applies marine paints. Associated companies of Kano act as handling agents for aircraft at Dhahran and Bahrain. Comprehensive shipway and marine workshop facilities are provided by yet another Kano company the Bahrain Ship Repairing and Engineering Company, which also carries out repairs afloat using mobile repair squads.

Based in Montreal, the Canadian company Scandia Shipping Agencies has established associated offices in Saudi Arabia, through the Saudi Maritime Company, and in the United Arab Emirates their agent is the Solimar Shipping Company. Within the Middle East Area there are over 100 national agencies, such as the National Shipping Agency at Bahrain, which does all the important jobs for the shipowner, changing his crews (and repatriating them), delivering mail and stores and supplying courier services to the airport.

The tendency is for agents to concentrate on the lines operating between the UK/Continent and Gulf, and three companies, Muttrah Shipping Agency, United Shipping Agencies, Gulf

Agency Company and Modern Freight Company, all serve the EurAsian Line which links Northern Europe with the Gulf.

Almost paralleling the sharp increase in the number of vessels serving the Middle East is the growth of drydocks and marine engineering facilities. At the end of last year the new ship repair complex of the Arab Ship Repair Yard (ASRY) was in operation and by September this year more than 100 vessels had used the facility. The giant ASRY drydock is at present managed under contract by the successful Lisnavé shiprepair group of Portugal. A second drydock is scheduled to become operational at Bahrain in 1981. Three other major repair projects are scheduled to become operational in the next three years. These are the very large three-drydock complex at Dubai (due to be finished early next year), the two VLCC drydocks and floating dock at Bandar Abbas in Iran in 1982 and a facility for vessels of up to 35,000 dwt at Shuwaikh, the port of Kuwait.

Ship and machinery repairs are handled by the Gray Mackenzie-owned Bahrain Slipway Company, where vessels of up to 1,000 dwt can be slipped and repairs carried out afloat on larger vessels. Reference has already been made to the associated company of the Kano Group, the Bahrain Ship Repairing and Engineering Company, which also carries out repairs to electrical and mechanical equipment.

W. D. Ewart  
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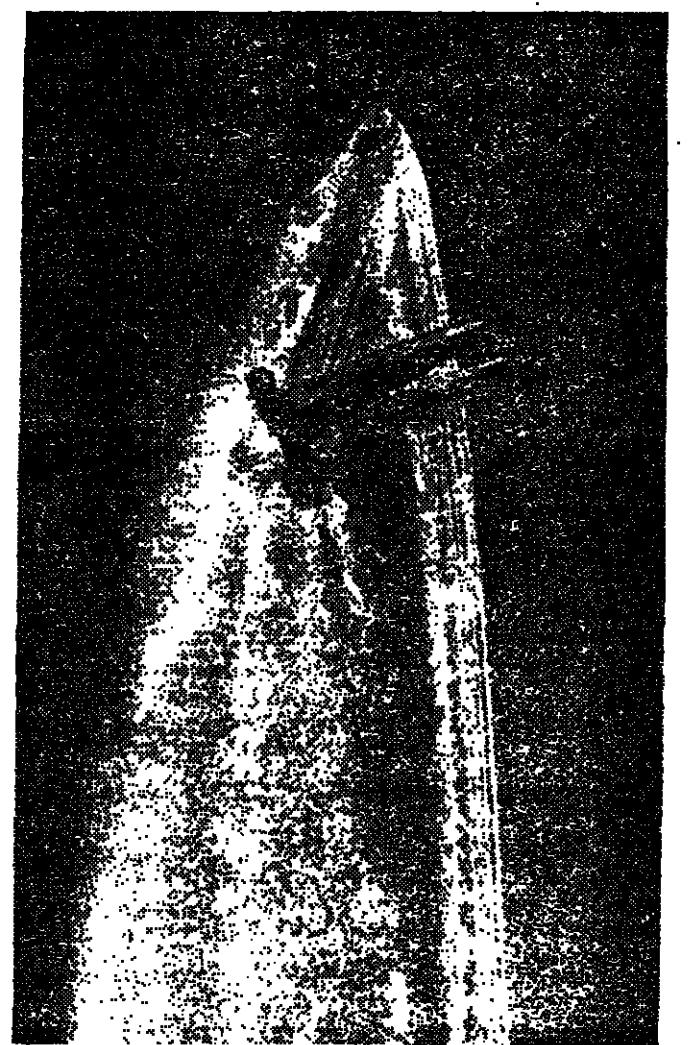
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## ARAB TRANSPORT VI

## Airlines

## New emphasis on domestic services

THE MIDDLE EAST is now one of the busiest, and certainly the most rapidly expanding, air transport region in the world. Statistics issued by the International Air Transport Association show that between now and 1983, the rate of traffic growth for scheduled passengers alone in the Middle East region—mainly the Arab world—is likely to exceed 14 per cent, compared with the average annual growth rate for the world as a whole of about 8.9 per cent, while for cargo the expansion is expected to be approaching the same volume.

This growth is due to several factors. The first inevitably is the growth of the oil wealth in the Middle East in the past few years, which is stimulating an unprecedented economic expansion. But it is also due to the fact that the aeroplane itself is increasingly seen to be not only an instrument of economic growth, but also of sociological development. In many parts of the Middle East, roads and railways either do not exist, or at best are limited, and the aeroplane is often the only means of opening up large areas of territory for subsequent development.

Thus, in many parts of the Arab world, the emphasis is as much upon the development of domestic air services as on the development of international links, and on the creation of fleets that not only include such major long-distance types as the Boeing 747 Jumbo Jet, but also much smaller aircraft like the turbo-prop Fokker F-27 (twin-engine), down to Beech, Cessna and Piper light aircraft, for executive travel and communications work (the growth of private aviation in the Middle East area, while rapid, is still subordinated to the development of airline operations themselves).

## Expansion

The expansion in civil aviation throughout the area is reflected in the growth of activity at the airports in the region. Figures prepared by the Arab Air Carriers Organisation (AACO), listing 18 major scheduled airlines among its members, shows that in 1977, the airports throughout the region handled over 15m passengers, or over 17 per cent more than in the previous year.

For 1978, the figure is expected to grow by the same amount again, and could come close to 20m passengers. Virtually every airport throughout the region shared in the expansion, the only major exception being Beirut, which in 1977 was still struggling back after the civil war of 1976, which virtually wiped out tourism to the Lebanon and seriously disrupted business traffic. The further strife in 1978 has severely hampered a return to normal air travel conditions, but Middle East Airlines reports that it has been able to maintain a substantial number of its services, and is fighting back determinedly.

The Arab Air Carriers Organisation is the principal international authority concerned with air transport affairs in the Middle East. While many of its members are also members of the wider International Air Transport Association, the AACO itself is particularly concerned with trying to unify the approaches to all air transport activities throughout the region, acting as a consensus of views on such matters in discussions with governments, airlines and other civil aviation organisations, such as the International Civil

Aviation Organisation. It lists among its members 18 airlines, including Air Algerie, Air Mauretanie, Air Jordan, Aljazeera, Yemen, Egyptair, Gulf Air, Iraqi Airways, Kuwait Airways, Libyan Arab, Middle East Airlines, Royal Air Maroc, Saudia of Saudi Arabia, Syrian Arab, Somali Airlines, Sudan Airways, Trans Mediterranean Airways (an all-cargo carrier), Tunis Air and Yemen Airways.

Between them, these airlines own a fleet of over 190 jet airliners of various types, with at least another 20 on lease. The fleet includes more than 10 Boeing 747 Jumbo Jets, 15 Lockheed TriStars and two European Airbus, among the wide-bodies. These long-range jets are supplemented by a fleet of over 50 Boeing 707s and 21 Boeing 720s.

## Regional

So, the immensely regional nature of air transport operations throughout the Middle East, a very large number of short-haul routes, is illustrated by the very high proportion of short-haul flights in the fleet—over 50 Boeing 737s and 40 Boeing 720s. In fact, the fleet lists clearly now far exceeds the Middle East's own airliner, with over 100 of its aircraft spread through the airlines in the AACO.

In addition to the jets, the AACO members' fleets also include close to 50 piston-engine and turbo-prop aircraft of various kinds, including a large number (35) of Fokker F-27 (twin-engine) turbo-prop aircraft (again indicating the short-haul, low-density traffic nature of many of the internal operations inside the Arab world). It is also still possible to find a DC-3 piston-engine aircraft, but these are ageing and it is not likely to be long before they disappear from the fleets entirely.

Another indication of the expansion that is taking place in Middle East air travel is the fact that in 1977 the 14 largest members of the AACO collectively produced over 5.36m available tonne-km — one of the basic units of measurement of air transport performance — representing a 27.5 per cent growth on the preceding year. Of those, no fewer than 4.81m available tonne-km were on international operations, a rise of 25.8 per cent.

Biggest of all the Arab airlines in the passenger field is Saudia, the flag airline of Saudi Arabia, which last year produced no fewer than 1.24m available tonne-km, representing a 61.4 per cent growth over the preceding year. Of this, about 819m ATKMs were produced on international operations, a growth of 63 per cent, and the rest on domestic operations inside Saudi Arabia, where the airline's activity grew by 58.3 per cent.

The extent of Middle East Airlines' recovery last year from the setback caused by the civil war in Lebanon is reflected in the fact that it achieved an expansion of over 112.17 per cent to 360m ATKMs.

All the major airlines throughout the region showed growth last year, but the pattern was mixed, with only a small expansion being shown by Sudan Airways, and small declines in the cases of Syrian Arab and TMA. Preliminary estimates for the current year indicate that this pattern of strong growth with only minor exceptions throughout the region has been repeated, and all the signs are

that it will continue at least for the immediate future.

This optimism is reflected in both the expansionist nature of the airlines themselves, through their aggressive route policies, and through their re-equipment plans. Virtually every airline in the region has in the past few years extended its route network, especially on an international basis, either within the Middle East itself or on longer-range routes linking major cities in the region with Western Europe, South-East Asia, the Far East and North America.

So far as the long-range routes are concerned, these expansion plans are being based on the use of the Boeing 747 Jumbo Jet and the Lockheed TriStar. So far, five airlines in the region (Saudia, Syrian Arab, Iraqi Airways, Middle East Airlines, Saudia and Gulf Air) have acquired 747s, while two (Saudia and Gulf Air) have acquired TriStars. Saudia now operates all its 13 flights a week between London and the Kingdom by TriStars or 747s, seven of them non-stop, with late morning departures every day to dovetail with incoming flights from Europe, the U.S. and inside the UK.

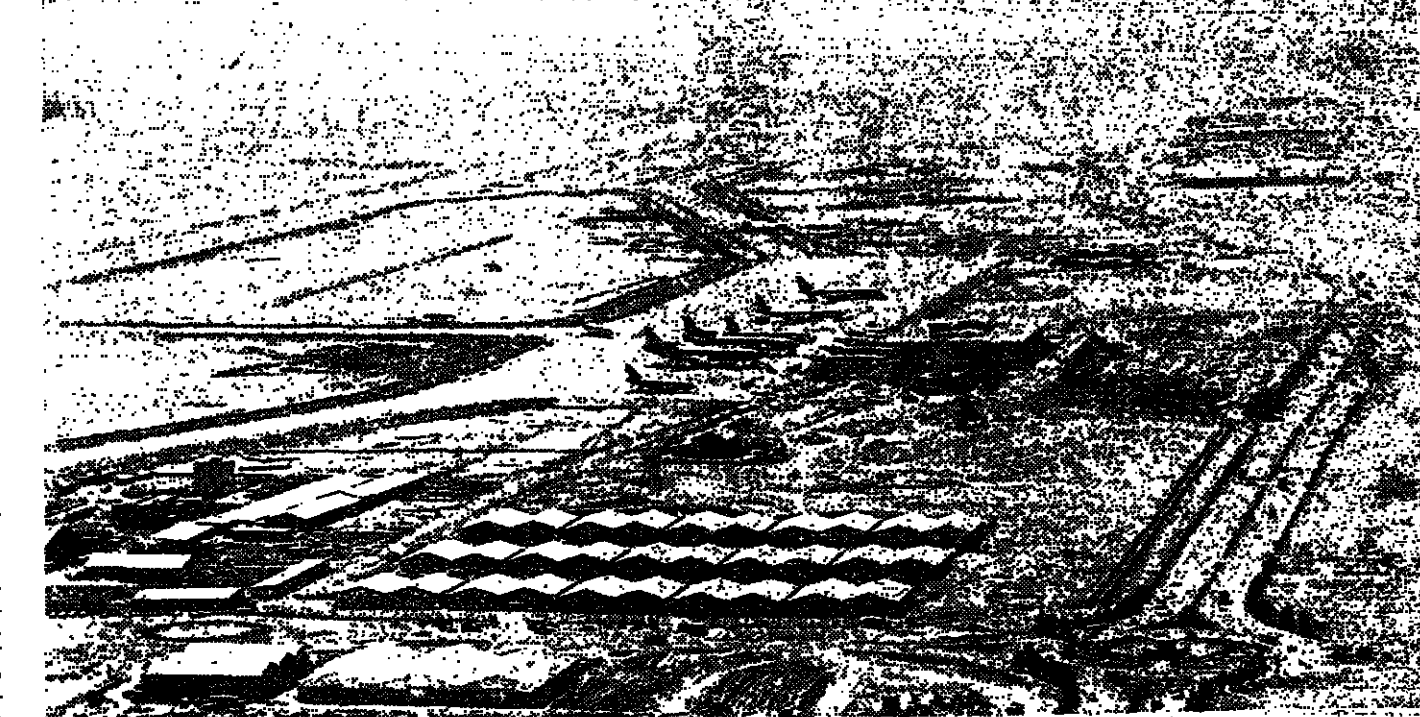
Gulf Air operates nine flights weekly from London to the Gulf, all non-stop, using TriStars, while Kuwait Airways recently introduced its "businessman's Jumbo," with three flights weekly between London, Cairo and Kuwait, plus one direct flight to Kuwait, with onward connections to Abu Dhabi, Dubai and Bombay.

At present, no Arab airline operates Concorde, and the only services into the area are those by British Airways to and from Bahrain. Eventually, some time in 1979, BA is hoping to be able to resume its onward Concorde flights between Bahrain and Singapore, which will open a new opportunity for Concorde from Singapore into the Far East and Pacific basin. But the possibility of some Arab airlines showing interest in Concorde cannot be overlooked. Middle East Airlines itself

has frequently suggested the possibility of a supersonic service between Beirut and/or Cairo to New York, using Concorde, travelling superphonically to the South of France, thence subsonic either to Toulouse or Paris for refuelling (and to pick up more passengers), and then onwards superphonically to New York. The idea has been discussed between a number of Arab airlines this past year, but so far it seems that the Arab carriers are more immediately concerned with seeking rights for direct flights subsonically to New York, with Boeing 747s, before committing themselves to Concorde.

This subsonic operation to New York is of particular interest to Alia of Jordan, and Syrian Air (who already operate a joint service to New York), Kuwait Airways, Middle East Airlines, Saudia and Gulf Air. These carriers earlier this year formed a private committee to study the situation, and discovered that there was enough traffic between the Middle East and the U.S. to justify the operation. A formal application to the U.S. on behalf of the group for the service is now under consideration, and it is possible that it could start later in 1979 or in 1980.

On the shorter routes, both internationally and domestically, the expansion to date has been built round the Boeing 727 and 737, and this trend seems likely to continue, despite the pressures from Airbus Industrie in Western Europe to win sales for the A-300 Airbus, and now also the recently-launched smaller 300-seat A-310 version. But Boeing is well entrenched in the region, and is already making a major sales drive there for sales of its new 200-seat 767, a direct competitor for the A-310, and also with its smaller 737, a 180-200 seat narrow-bodied jet, which is powered by the new Rolls-Royce RB-211-535 engine. Thus, with continued expansion forecast, and no lack of cash for re-equipment, the Arab market is likely to see some formidable sales



A view of Dubai International Airport

battles between the major airframe and aero-engine manufacturers in the next year or so, establishing fleet patterns to carry those airlines through the 1980s.

While passenger transport to, from and within the Arab world is on the increase, however, freight shows a different pattern. To some parts of the region, freight traffic has declined in recent months, for a variety of reasons. Freight traffic by air to and from the Gulf area in particular, for example, has fallen. This is due to changes in economic conditions stemming from the fall in the value of the dollar, which together with a decline in demand for oil as a result of energy conservation schemes in western countries (together with the expansion of North Sea oil supplies), has cut some Arab industrial expansion schemes. At the same time, improved port handling capacity, and the introduction of an increasing

number of sea-borne container services, have cut demand for all-cargo flights. Furthermore, competition in the air itself is increasing, with more UK and Continental all-cargo operators seeking business, while the steady growth of the number of big jets in the passenger fleets of major airlines in the area, with capacities belly-holds, is resulting in more traffic being carried by the scheduled airlines.

The likelihood of this competition intensifying is acknowledged by some of the charter operators flying into the region. Some of the major scheduled carriers, such as British Airways, while still more expensive than the charter operators, are understood to be seeking to introduce cheaper bulk commodity rates for cargoes, which could erode the position of the charter operators.

Some major charter operators, however, are already moving to meet this situation, by tailoring

their cargo concepts to meet the changing pattern of demand. IAS, for example, the UK's biggest all-cargo airline, is now seeking increasingly to operate its flights directly to the final destinations required, so as to eliminate transshipments by road, although the latter remains a substantial factor in the air cargo business. But it is also now promoting its new Skyship service, whereby shippers can get the benefit of a joint sea-air service through Sharjah, whereby goods coming by sea from India can be transhipped at Sharjah on to IAS DC-8 jets for onward carriage to Gatwick. IAS says that its market surveys have indicated an initial demand for this type of service amounting to about 1,000 tonnes a year to the UK alone, with other markets in Europe and Australia likely to require additional capacity.

But despite these current problems, the overall view is that air freight to and from

the Arab world generally is likely to pick up again, and could return to a high level. It is pointed out that throughout the entire Arab world, despite some cutbacks, the overall trend is still towards development and expansion rather than away from it, and that this will need a consistently high level of imported goods of all kinds for a long period to come. Even in the industrial countries of the West, with their big sea-borne trades, there is still scope for an expanding air freight industry, and the same is true of the Arab countries, where air cargo is still comparatively in its infancy. Within the overall demand, however, the mix between charter operators and scheduled airlines may well change in the period ahead, and competition within both parts of the aviation sector will increase.

Michael Donne  
Aerospace Correspondent

## Airports

## Steady growth in traffic

THROUGHOUT THE Arab world, the major international airports collectively handled over 15m passengers in 1977, or over 17 per cent more than in the previous year. Estimates for 1978 have not yet been prepared but it seems likely that the expansion will not be less than last year, so that a total traffic volume of around 20m passengers is possible.

These figures reflect the one dominant fact about air transport throughout the Arab world—that it is expanding at a substantial rate. This is not only because of the growing oil wealth throughout the region, which is encouraging international business travel in both directions, but also because the economic growth stemming internally from this oil wealth is stimulating the expansion on internal air services on a major scale.

The Arab world reflects in fact, more than any other major region of the world, just how far the aeroplane is being used as an instrument of economic and sociological development. The area is vast, in many parts sparsely inhabited, and centres of population are separated by large areas of inhospitable terrain, through which it is extremely expensive, apart from being physically difficult, to drive roads and railways.

While the latter are certainly not being ignored, in many parts of the region it is often quicker and less expensive to develop internal air communications. Airports sound glamorous, but they need not be, and indeed in many parts of the world they are not—the most important requirement is a reasonably flat area on which to construct a runway with obstacle-free approaches and to build associated terminal buildings (which, initially at least, can be small) together with aprons and taxiways.

This is not to minimise the civil engineering problems involved in airport design, development and construction, which can sometimes be formidable, both for physical terrain and logistical and climatic reasons. But as a result of the vast wealth of technological expertise in airport design, development and construction that is now available in the West, it is possible for any country in the Third World, including Arab countries, to get its own air transport infrastructure reasonably quickly, and without extravagance.

Some of the new airport de-

velopments in the Middle East, for example, are costing little more than £2m for a runway, with about the same amount for terminal buildings and associated facilities. At the other end of the scale, however, it is possible to spend several hundred million pounds on a major international airport capable of handling millions of passengers a year.

## Earmarked

Throughout the Arab world E1bn is already either being spent or is earmarked on a total of more than 80 separate new airport programmes, ranging widely from improvement projects at small airports to the construction of massive new international airports fully equipped to the most modern standards. Among the latter are the development of the new international airport at Riyadh in Saudi Arabia at an estimated cost of £165m, and the new international airport at Jeddah estimated to cost about £85m.

Saudi Arabia accounts indeed for the vast majority of the airport programmes currently envisaged or under way (close to 30), costing in all more than £500m, with several more likely

to emerge in the foreseeable future, reflecting the determined intention of the Kingdom to bring itself into the mainstream of both domestic and international civil aviation by the early 1980s. Places in Saudi Arabia at which new runways, new terminal buildings or other developments are in progress include Taif, Dhahran, Bisha, Hail, Wejeh, Jof, Khafji, Qurayyah, Turayf, Tabuk, Khams Mushay, Qunfudah, Qaisumah and Yanbu.

Outside Saudi Arabia there are major programmes envisaged or in progress in Bahrain, Jordan, Kuwait, Libya, Oman, Qatar, Abu Dhabi (where a new £140m airport is being developed), and in Dubai and Yemen.

This actual and potential expansion is inevitably generating a formidable amount of competition among the large number of airport design, development and construction consortia which have blossomed throughout the Western world in recent years in response to the demand. With their already existing reservoirs of talent in all aspects of airport design and construction, and even operation, the major air transport

countries of the West—the U.S., Britain, France, West Germany and Italy and Holland in particular—have generated almost a plethora of individual companies or groups capable of meeting virtually every demand that any emerging nation desirous of its own air transport infrastructure is likely to require.

In Britain, for example, the British Airports Authority, probably the biggest single airport owner in the world, has linked with International Aeradio, which already has a vast amount of expertise in airport development and maintenance, to form British Airports International.

But the competition is already well entrenched. The Paris and Frankfurt airport authorities are already vigorous, and a number of Dutch, Italian, Brazilian and U.S. consultants and engineering groups are also involved. Also from Britain itself several major industrial groups have already won major contracts.

There is also available a substantial amount of expertise among the world's major civil aviation bodies. The International Air Transport Association, the body representing most

of the world's major scheduled airlines (to which many of the major airlines in the Arab world already belong) is also a significant force behind the scenes in ensuring the smooth and orderly development of world civil aviation, and is available to give advice to the airlines and airport authorities on technical and operational standards.

In addition, the International Civil Aviation Organisation, the aviation technical agency of the UN, not only provides technical assistance but also cash grants to enable emerging countries to develop their civil aviation activities in accordance with accepted Western standards of safety and efficiency.

## Accepted

The availability of these already accepted and proven standards of airport development and operation ensures that, especially where international operations are concerned, new airports can be integrated swiftly into the existing world air transport system with the minimum of difficulty. Without the existence of these international standards, airport development in the Third World would be much more difficult and expensive — and perhaps even chaotic.

Just how far the expansion of airport development will go in the Arab world remains to be seen. Undoubtedly a substantial

part of the immediate demand has already been met or is in process of being met, and the number of new contracts that will be available in the immediate future may be considerably less than in the immediate past.

But there is little doubt in the minds of most of those involved in the business that provided the economies of the countries in the Arab world continue to expand, so will the demand for air transport, both domestically and internationally—and that is likely to create a steady demand for new ventures, either in the form of improvements to existing airports or in the development of new.

As one consultant has put it: "They are starting a long way behind Western Europe and the U.S. and have a long way to go to catch up. Their populations are expanding and their standards of living are rising. We have seen throughout the world that both these factors are conducive to the development of civil aviation, with all that means in terms of demand for aircraft, airports, ground services and other facilities. There is no reason to believe that short of any major difficulties, such as befall the Lebanon, for example, that it will be any different for the rest of the Arab world through the 1980s."

Michael Donne

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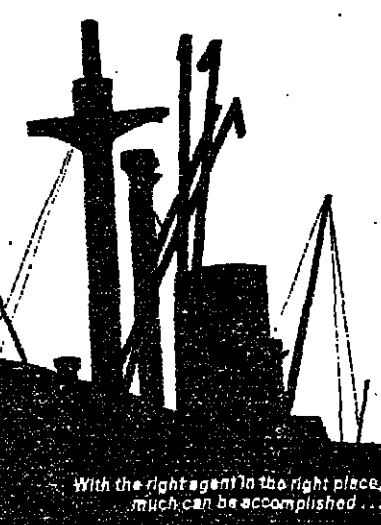
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# Rhodesia's rocky road to black rule

By TONY HAWKINS, Salisbury Correspondent

MR. IAN SMITH'S ruling Rhodesian Front Government today marks the 18th anniversary of its first election victory in December 1962 by starting to abolish all the policies it was originally returned to uphold. In an unprecedented move, Parliament is being recalled a week before Christmas to abolish the Land Tenure Act (frequently described in the past by Mr. Smith and his colleagues as "the cornerstone of western Democratic civilisation" in Rhodesia), and to end racial discrimination in schools and hospitals.

## War goes on

But while the internal settlement partners are discussing legislative and constitutional change, the war between them and the Patriotic Front guerrilla movement is still escalating. Nothing illustrates this more graphically than the guerrilla attack last week on a strategic Salisbury fuel depot.

In theory, both the abolition of racial discrimination and the handover to majority rule can still be frustrated by right wingers within and without Parliament. Some of the legislation to abolish discrimination requires a two-thirds majority in Parliament, but even if some of Mr. Smith's backbenchers re-

volt in the lobbies, the votes of the 18 independent black MPs will ensure that the Bills go through the House.

In theory too, the white electorate can vote against the new constitution (due to be published before Christmas) on January 30, but the process of handing over power to a multi-racial coalition government has in practice gone too far to be overturned by 80,000 voters. In the very unlikely event of the electorate voting against the internal settlement, the transitional government would have no alternative but to ignore the result. Indeed, the decision to abolish racial discrimination before the referendum underlines the irreversible nature of the decisions of March 3.

Although there is widespread disillusionment among whites as well as blacks with the internal settlement, the likelihood is that Mr. Smith will get his mandate at the referendum, albeit with a low turnout and against a significant "no" vote. Disillusionment with the interim agreement stems from its failure to achieve any of its stated goals—international recognition, an end to the war, and the removal of economic sanctions. The whites blame the domestic black leaders, especially Mr. Sithole and Bishop Muzorewa, who they say, have failed to deliver their side of the bargain—an effective ceasefire and a rundown of the war. For their part, the blacks blame Mr. Smith and his colleagues for pandering to white susceptibilities to such an extent that moderate nationalists are losing support to the extremists in the Patriotic Front of Mr. Nkomo and Mr. Mugabe.

Even since his public acceptance of majority rule—in the Kissinger Agreement of September 1976—Mr. Smith has been preoccupied with the need to

retain white confidence. In the internal settlement agreement this took the form of insisting that the whites should have 28 reserved seats in the 100-member parliament. They will have the power to block any future amendment to the agreement if at least 22 of the white members voted against it. At the same time, it appeared that the whites were not going to be eligible for cabinet rank since the agreement of last March stipulated that the 28 white MPs could not join with a minority party to form a coalition government, keeping the majority black party out of office.

## New package

But last month, in a move designed to bolster morale at a time when white emigration had risen to record levels, the transitional Government announced plans to dilute majority rule by establishing a national coalition Government after the elections on April 20. Under this agreement, any party that wins at least five seats in Parliament will be entitled to pro rata cabinet representation. In other words, if Mr. Smith's Rhodesian Front (minus Mr. Smith himself who said this week that he is definitely not standing for Parliament again) wins all 28 white seats, it will be entitled to 28 per cent of the cabinet posts.

Indeed, it is conceivable, though unlikely that the whites could emerge as the largest single bloc of MPs if the black vote were to be sufficiently fragmented between the half-dozen or so black parties expected to contest the elections. But it is more likely, even despite his visible loss of support in recent months, that Bishop Muzorewa's

United African National Council will win at least half the 72 black seats, thereby ensuring that the Bishop becomes Prime Minister and that his party will hold the largest number of cabinet posts in the coalition. However, it is considered most unlikely that the Bishop will win the 71 per cent of the black votes necessary to give him both

among eight provinces and the proportional representation formula, will apply separately in each province. In Matabeleland North, for instance, which has been allocated ten seats, a party polling 50 per cent of the votes cast in that province will win five seats. This regional—or quasi-tribal—representation is designed, probably unsuccessful-

It was difficult enough to sell an agreement which gave 28 per cent of the seats to 3 per cent of the voters. It is all the more difficult to sell an agreement that gives 3 per cent of the voters nearly one-third of the cabinet posts. By any yardstick this is a considerable dilution of the majority rule principle.



Glum faces in Salisbury on November 16 as the Executive Council announces revised plans for the handover to black rule. Front row from the left: Chief Jeremiah Chimau, Mr. Ian Smith, Bishop Abel Muzorewa, and the Rev. Ndabangani Sithole.

a parliamentary majority and a cabinet majority. In other words, he could easily find himself in the difficult position of being outvoted in cabinet by his colleagues.

Last month's changes to the package of March 3 have made this more rather than less likely to happen, since the original plan for a proportional representation voting system operated nationally has been replaced by a regional system. The 72 black seats have been divided up

fully, to induce the Ndebele, in particular, to cast their votes next April. The argument is that regional representation will ensure that minority tribes, such as the Ndebele will be assured of greater parliamentary representation than had the other system been applied.

There are two main drawbacks to the whole coalition plan. First, it has understandably been interpreted as a ruse to keep whites in executive positions after majority rule.

Secondly, the regional voting formula makes it less rather than more likely that no single party will emerge with a clear-cut majority. Not only does this make coalition government inevitable, but it means that the chances are heavily weighted against the emergence of a strong and decisive administration. Cynics argue—unfairly—that this is what the whites want: a shaky coalition Government that leaves decisive power in the hands of white

civil servants, police and army commanders.

Advocates of the new formula argue that it is essential if the exodus of whites, expected to exceed 12,000 in 1978 or nearly 5 per cent of the white population, is to be slowed. They argue too that the regional representation system is likely to secure a higher voter turnout than proportional representation applied nationally. In particular they claim that the Ndebele are now more likely to go to the polls even if Mr. Nkomo's Zapu party boycotts the election, as seems certain.

Obviously voter turnout is going to be crucial. This month's reported high poll in the Namibian elections is liable to make the Rhodesian turnout look embarrassingly low. Few observers here expect as many as half the 2.9m eligible black voters to go to the polls on April 20. If the Ndebele do abstain in large numbers, the turnout could be as low as 30 per cent.

## Contradictions

Such is the contrast between the transitional Government's coalition plan on the one hand and the Anglo-American settlement proposals on the other that it is impossible to be optimistic about the outcome of any all-party conference should it prove possible to get as far as convening one. At heart the two sets of proposals are essentially contradictory in that the internal settlement is designed to retain a permanent white presence in Rhodesia—hence Mr. Smith's persistent harping on the need to retain white confidence—while in the other formula whites in the last resort are an expendable minority. It is hardly surprising that the

Anglo-American plan should be much more acceptable internationally than the internal settlement. Equally, it is not surprising that the white minority should seek to avoid a repetition of the political and economic problems experienced by majority-rule governments throughout Africa.

## Fearful outlook

What is at issue is whether the Anglo-American formula or the diluted agreement of March 3 offers the best hope for an orderly transition to majority rule and a stable, non-racial society thereafter. The unhappy prospect is that like the rest of Africa, Zimbabwe will not become a stable, non-racial democratic society. The birth pangs are likely to be extremely unpleasant with the civil war that is already under way between the private armies of Mr. Nkomo (Zapu), Mr. Mugabe (Zanla), Bishop Muzorewa (UNAC) and the Rev. Sithole (Zanu) intensifying in 1979. Zimbabwe will be lucky indeed if its first majority rule Government is successfully chosen as a result of free one-man-one-vote elections.

The more likely scenario is that the elections on April 20 will go ahead against a background of terrorism and intimidation, and that the combination of internal opposition to the internal agreement, a bad security situation, a low turnout, and the national coalition formula will ensure that the country remains without international recognition and still be subject to economic sanctions, despite the emergence of a black Prime Minister and black majority in both Parliament and Government next April.

## Letters to the Editor

### The Board is the servant

From the Director General, Institute of Directors

Sir—It seems to me that Mr. Wolf (December 12) is guilty of far greater confusion than that he ascribes to Mr. Cole (December 6), whose picture of the Board is the accurate one.

No one needs any that a minority of directors are members of the Board by virtue of their shareholding in the company. Indeed, it would be unhealthy if this were not so, for the identification with the success of the company which a large shareholding creates must add zest to the whole Board's determination to succeed. One of the fears we have about the Companies Bill, currently going through its committee stages in Parliament, is that the well-intended provisions on insider dealing could discourage directors from holding shares in their own companies.

But the relevant feature of our present system for selecting directors is that it sets out to do so on the basis of directors' ability to do the job. Whatever the shortcomings of this existing system, directors are judged in the end on their ability to produce results. They are not chosen on the basis of electoral popularity nor as representatives of a narrow interest group. The Board is the servant of the company, not of any particular interest.

If the Government's proposals for what it is pleased to call industrial democracy ever reach the statute book, the ideal for a Board of directors will change from that of a tight-knit integrated team seeking success for the company through service to the customer into that of two teams representing separate interests, more concerned with a division of the company's wealth than with its creation. That cannot be in the real interests of anyone.

The Government's proposal for a two-tier Board, along the German or Danish lines, is something of a red herring. The idea is superficially attractive, placing as it would, trade union nominated directors largely out of harm's way on the upper policy Board, leaving the real work and the real responsibility elsewhere. But the danger for the company lies in the upper Board's lack of initiative. If the upper Board, which is ostensibly responsible for the direction of the company, has the power neither to initiate nor to take command in emergency, how can it possibly be effective?

I, therefore, agree with Mr. Wolf that we want a system in which directors are appointed on the basis of merit. But we also want a system under which our Boards of directors are not deflected from their proper purpose. The primary purpose of business enterprise and, therefore, of the Board is to produce society's goods and services. The Board owes its first duty to the customer, and it is towards a "customer democracy" not an "industrial democracy" that we should be heading.

Jan Hildreth,  
116, Pall Mall, SW1.

### True industrial democracy

From Mr. N. Cragoe

Sir—I am most grateful to Mr. Cole (December 6) for his support as tendered in his reply to Mr. Fox, and while I am at all times delighted to be awarded anything might I just say to Mr. Fox on my behalf that I have

most often observed arrogance to be in the eye of the beholder rather than in the accused.

I would not want anyone to come forelock in hand unless, of course, he wished to do so but I do most desperately want to see proper arrangements made for the most comprehensive consultation of and between all levels of industry, not least because the other approach seems to be running us into the ground and very strangely—is it not so?—commanding the united effort of all levels of industry in the process.

To my mind, the added value type approach enables true industrial democracy to germinate and flourish, clear of academic and political clap-trap by which this whole problem is surrounded at the moment. I cannot believe that Mr. Fox can believe that workers elected by their own shop-floor are necessarily the best people to represent shop-floor interests—they can be elected for so many other reasons such as personality or a loud mouth—or can I believe that Mr. Fox can seriously suppose that trade union nominees from outside the company concerned can have any other result than a political one.

I have just read Mr. Wolf's letter (Running the company, December 12) and note what he says about elected Boards. The case is rather different perhaps and certainly less political in the party-political sense. Where this is not true, if at all, since when did two blacks make a white?

N. L. Cragoe,  
50, Pall Mall, SW1.

### An exotic story

From Mr. K. Whitehead

Sir—Paul Dean (December 15) states that pension schemes must be seen to be well run if they are to withstand political threats to their independence and freedom of action. This being so may I protest at the serious nature of your article of December 2 concerning small privately administered pension schemes.

The headlines, the picture of the yacht, the righteous indignation, "this misuse of tax privileges", etc., clearly served to give the impression that small self-administered pension schemes full of exotic investments were, if not the norm, certainly quite common.

What are the facts? Putting aside the waste of money usually associated with the yellow rather than the pink Press I ask the clear question: do such exotically "invested" pension schemes really exist? Alternatively are they a figment of imagination or, more charitably, a mere illustration of a theoretical possibility?

I have to say that I put this clear question to the author of your article who replied in an equally clear manner: no, he did not actually know of any specific pension scheme so exotically invested. As luck would have it, however, the man who gave him the idea, etc., was close by. The chances of extending the question one further link down the chain again drew the clear answer: no he did not actually know of any specific pension scheme so exotically invested!

It came as no surprise, therefore, to learn that at a conference of some 300 individuals all professionally concerned with small self-administered pension schemes no one was able to say that they actually knew at first hand of any specific pension

scheme with such exotic investments.

The conclusion I draw is that if such schemes exist at all they must be very very rare indeed. Do any of your readers actually know of any such exotically invested pension schemes at first hand?

Those of us concerned with occupational pension schemes can attempt to run them well and also attempt to be seen to run them well but how can we be expected to deal with the impact of politicians and public of articles exposing "this misuse of tax privileges, etc., based, it would seem, on pure imagination.

K. G. Whitehead,  
70, Brook Street, W1.

### Pension fund figures

From Mr. D. Cutler

Sir—The interesting Lex column (December 11) on the subject of pension funds, leads me to refer again to the unsatisfactory feature of the performance statistics at present available which provide only one composite figure for rate of return based upon: (a) investment income; plus or minus; (b) changes in the market value of the portfolio allowing for realised profits and losses.

These changes (b) in market value usually form the largest constituent in the so-called rate of return, often swamping the figure (a) for the actual investment income and producing wild fluctuations from year to year which have very little practical relevance in the case of large pension funds.

The president of the Institute of Actuaries recently stressed the overwhelming importance of income and, of course, this particularly applies in the case of pension funds which are not subject to tax and thus receive the full benefit of gross income and of the compounding factor at current high gross rates of interest.

The present difference between the yield on a long-dated gilt and that on the FT-Actuaries All-Share Index is some 7.6 per cent gross and a simple calculation shows that even if equity dividends increase overall by 10 per cent regularly every year, the yields in the case of a pension fund will not equalise until the 10th year. In the meantime, however, the shortfall in income will have accumulated to more than 90 per cent if, for sake of argument, interest is assumed to accrue at 13 per cent for the first year declining by 1 per cent per annum thereafter.

The trustees of a pension fund must obviously consider most carefully whether this very large loss of accumulated investment income will be justified by the position of equities in 10 years' time and by the then future outlook for them. This is a truly unenviable task in these days when it is difficult to look ahead 10 months let alone 10 years and when "historical" data is of only limited value because history was made in such totally different circumstances.

It must obviously be helpful to trustees to be able to see from performance statistics what part of the rate of return rises from actual investment income as distinct from paper fluctuations in capital values.

In all the circumstances is it too much to hope that some

responsible party will see the light and have the enterprise to provide separate figures for the two constituents of the rate of return instead of only one composite figure? The data must be available so that it is only a matter of making the necessary alteration to the computer program. If this is felt to be too troublesome I can only say that it emphasises the sad lack of foresight when the form of the statistics was originally decided upon.

D. S. Cutler,  
Lincombe, 9, Woodlands Road,  
Surrey.

### Planning for electricity

From the Editor, Energy International

Sir—In saying that we shall need electricity to substitute for many other fuels as shortages develop in the future, Mr. Green (December 13) has hit on a basic truth which has too often been overlooked in many discussions of our future energy requirements.

One fashionable argument from those who advocate conservation and/or oppose nuclear power is that we will not need to build any more large power stations if we convert all the existing plants to cogeneration and supply district heating and industrial process heat as well as electricity at greatly enhanced efficiency. That this is not happening is probably due to two events: the national response to which can now be seen to be mistaken—the Clean Air Act and the discovery of natural gas in the North Sea just over a decade ago.

The passage of clean air legislation should have been the signal to bring in district heating coming as the act did before central heating really caught on in this country. The second mistake, I believe, was to push natural gas into every home possible, at enormous cost and inconvenience, and the exclusion of the electricity supply industry. Had things gone otherwise, we might now be enjoying district heating from gas-fired cogeneration units in all our major cities. As things are at present we face the prospect in the next century of not only distilling coal into oil but making it into synthetic methane. Will our coal supplies then last the 300 years that the National Coal Board has so recently been proclaiming in its advertisements?

As the decline in oil production approaches we should be planning to switch to an electric energy base for the very obvious reason that all the new energy sources are all exploitable, in many cases solely, through the process of electricity generation. As, indeed, is nuclear energy. Therefore we should be planning for the eventual substitution of electric heating for oil-fired heating in rural areas and the electrification of transport. Then, as demand for electricity rises, new power stations should be built where there is a demand for heat so that they can also provide industrial process heat and district heating as appropriate. Needless to say, the conversion of established energy systems to electric or to hot water or steam derived from the generation process will stimulate industrial activity in many important areas.

Eric J. Jeffs,  
Energy International,  
Portman House,  
104 College Road,  
Harrow, Middx.

## Today's Events

GENERAL

Australian Prime Minister, Mr. Malcolm Fraser, leaves Canberra for tour of U.S. and Jamaica.

Finance Ministers of EEC meet in Brussels to consider regulations for setting up European Monetary System (EMS).

Norway's Storting (Parliament) debates EMS.

TUC finance and general purposes committee meets, London.

European Communities Commission Foreign Affairs, Agriculture, and Environment Councils all start two-day meetings in Brussels.

Sir Kenneth Cork, Lord Mayor

of London, gives opening address to students from provincial universities taking part in City Induction course, at Mansion House.

British Psychological Society conference opens at London University (until December 19).

Last day of International Show Jumping at Olympia.

Last day of posting for second class Christmas mail.

Exhibition showing preparation and printing of the Post Office's Christmas stamps, Science Museum (until February 4).

Mr. Edward Heath conducts carol concert, Central Hall, Westminster.

Lord Mayor of London, Sir Kenneth Cork, attends Fleet Street Club lunch, Connaught Rooms, Great Queen Street; attends annual banquet of Royal Society of St. George, Mansion House.

COMPANY RESULTS

Final dividends: J. and F. B. Jackson, North British Steel Group, Interim dividends: Anglo American Asphalt Company, British Steam Specialities Group, Danes Investment Trust, A. Monk and Co, Siebe Gorman Holdings, Interim figures: Crown House, Trident (third quarter).

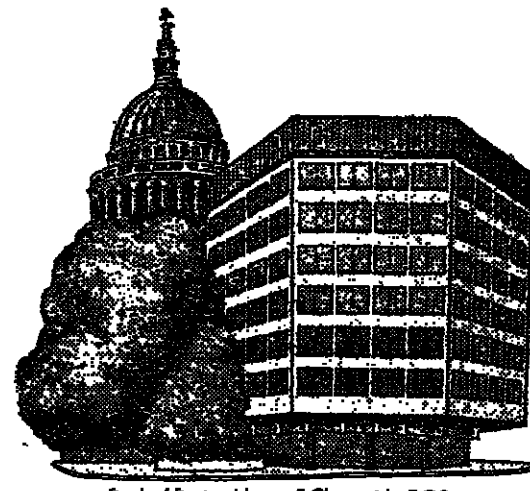
COMPANY MEETINGS

See Financial Diary on page 23.

## Airline offers cheaper fare

A PUBLIC Excursion fare of £49 return is to be offered on Southampton-Amsterdam flights of British Island Airways from January 1.

The fare, £8.50 less than the lowest-priced excursion fare presently available and which compares with a normal return fare of £52, will be available on all BIA early morning departures from Southampton and on reciprocal flights from Amsterdam, Monday to Friday.



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INTL. COMPANIES AND FINANCE

UK PENDING DIVIDENDS and ISSUES

Credito Commerciale sale approaches completion

BY RUPERT CORNWELL

ROME — The way now looks finally clear for the L233bn (233.3bn) sale of controlling interest in Credito Commerciale, a bank belonging to the Milan financier Sig. Carlo Pesenti, to the State-owned Monte dei Paschi di Siena Bank and its subsidiary Banca Toscana.

A Board meeting of Banca Toscana, agreed at last this weekend to take up a 25 per cent stake in Credito Commerciale alongside the 51 per cent that its parent has already accepted to acquire.

Italy's left-wing parties have publicly expressed strong opposition to the notion of a State-controlled bank in effect helping Sig. Pesenti to reorganise the finances of his bank within the group, Banca Provinciale Lombarda.

These tensions are the reason why approval by Banca Toscana has been held up for several days. And at the conclusive meeting, it is reported that a minority of its Board, aligned with the Communist Party, voted against the agreement.

Barring a last minute surprise, the complete package is due to be ratified this week at a Board meeting of Monte dei Paschi. As a consequence of the deal, the Siena Bank would significantly enhance its position within the Italian banking industry, where it is at present ranked in eighth place.

Sig. Pesenti would receive a L233bn injection of funds for the sale of his 79 per cent controlling interest in Credito Commerciale. But Monte dei Paschi has denied press reports here that as part of the arrangement, Sig. Pesenti would receive a further L200bn credit line from its group.

Monte dei Paschi di Siena at the end of 1977 had total deposits of L7,826bn (\$9.7bn), while Credito Commerciale — unofficially ranked 30th among the country's credit institutions — had deposits of L1,513bn (\$1.9bn).

Exchanges to hear appeal by Simpsons

TORONTO — The Ontario and Quebec Securities Commissions have scheduled a joint public hearing for today in Montreal to consider an appeal by Simpsons Ltd. against trading suspensions in its stock by the Toronto and Montreal Stock Exchanges and to consider a request by Hudson's Bay Company that would affect how Simpsons' shares could trade if the suspensions are lifted.

The Ontario Commission said that Simpsons applied for a hearing and review of the trading suspensions by the exchanges. It said Hudson's Bay requested a hearing to determine whether the commissions should prohibit any Simpsons trading unless the shares involved are traded as a unit in connection with the seller's right to receive the class B shares of Simpsons-Scars Ltd. to be distributed to Simpsons holders.

Canadian bid decisions

OTTAWA — Mr. Jack Horner, the Canadian Federal Industry Minister, said the Foreign Investment Review Agency has rejected a proposal by Honeywell to buy Incomet Computers and Terminals of Toronto, controlled by Incomet Corporation.

The Agency approved a plan by Kaiser Engineers, controlled by Raymond International, to acquire control of Henry J. Kaiser (Canada).

The acquisition follows the purchase by Raymond of Kaiser Engineers division from Kaiser Industries Corporation in 1977. The Canadian takeover was rejected at first.

Reuter

Armco sees profit near peak

NEW YORK — Earnings in 1978 for Armco, the major sheet steel manufacturer, will be "very near" its record 1974 earnings of \$202.2m or \$4.43 a share.

Mr. William Verity, chairman, told securities analysts that sales this year will approach \$4.3bn. He added that "We are looking for another strong year in 1979."

In 1977 Armco earned \$119.7m or \$2.53 a share on sales of \$3.57bn.

Capital investment in 1978 will total about \$148m and could rise to about \$200m in 1979.

Armco is continuing to decrease its emphasis on carbon steel products in favour of other businesses. By 1982 carbon steel will be only 45 per cent of Armco's operations, while such other operations as specialty steel products, financial services and oil field equipment and production will increase in importance, predicted Mr. Verity.

The industry's domestic steel shipments in 1979 will be "about the same" as the 97m expected to be shipped in 1978 if steel imports are reduced 20 per cent by the Carter Administration's trigger price mechanism.

Meanwhile, from Chicago, Inland Steel said it expects its first quarter bookings to be 15 to 20 per cent ahead of the year earlier.

Mr. Derrick Brewster, vice-president sales, said that Inland will have record shipments of about 6.2m tons this year, up from the previous record 6.1m tons in 1974. Last year Inland shipped 5.6m tons.

Agencies

Higher shipments at IBM

ST. LOUIS — IBM Corporation is experiencing a higher shipment rate in the fourth quarter with a "strong data processing purchase mix," Mr. John R. Opel, the president, told securities analysts.

The trend should "have a very positive effect on revenues and earnings in the fourth quarter." In the 1977 fourth quarter, IBM earned \$797m, or \$5.38 a share, on gross income of \$9bn.

For the first nine months, IBM had reported higher purchases of data processing equipment. For the nine months, net income rose to \$2.1bn, or \$14.24 a share, from \$1.92bn, or \$12.92 a share, while gross income increased to \$14.6bn from \$13.0bn the year before.

Commenting on the economic outlook for 1979, Mr. Opel said IBM expected Gross National Product to increase "a little less than 2 per cent" with consumer prices rising "more than 8 per cent," and an unemployment rate of "just under 7 per cent."

AP-DJ

CURRENCIES, MONEY and GOLD

Lira and punt to join EMS

BY COLIN MILLHAM

ITALY moved towards membership of the European Monetary System without undue excitement in the foreign exchange market last week. Short-term Euro-lira interest rates, already well into double figures, moved higher on the news that the country had decided to join the system after all, but longer term rates were unmoved.

Forward discounts against the dollar widened, but only slightly, while the spot lira/dollar rate was virtually unchanged on the week. It is even probable that the Bank of Italy bought dollars during last week, to keep the lira rate down, but this situation was something of an illusion, since all other major currencies rose quite sharply against a dollar that was hit by fears of a large oil price rise at the weekend's OPEC meeting.

In terms of the all important D-mark, the lira lost ground, with L1,000 quoted at DM2,236 in late trading on Friday, compared with DM2,250 a week earlier. The Italian authorities are obviously concerned that the lira should not enter the EMS at too firm a level against other stronger European currencies.

On Friday Ireland's Prime Minister, Mr. Jack Lynch, announced that his country will join the EMS on January 1, but the Irish punt will maintain its link with sterling. This seemed to be somewhat ambiguous statement since the British Government has already said that the pound will not be one of the founder currencies of the system.

Presumably the Irish Government hopes that sterling will not fall by more than 6 per cent, changed on the week. It is even probable that the Bank of Italy bought dollars during last week, to keep the lira rate down, but this situation was something of an illusion, since all other major currencies rose quite sharply against a dollar that was hit by fears of a large oil price rise at the weekend's OPEC meeting.

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THE DOLLAR SPOT

December 15	Day's spread	Close
Canada's 8	\$4.67-84.78	\$4.78-84.73
Guilder	2.8496-2.8545	2.8533-2.8580
Belgium Fr	29.94-30.00	29.97-30.06
French Fr	5.2835-5.285	5.2842-5.2850
D-Mark	1.8915-1.8925	1.8915-1.8925
Port. Esc	65.50-65.80	65.50-65.80
Spain	71.25-71.31	71.25-71.34
Lira	846.50-847.80	846.50-846.70
S. African R	84.50-84.60	84.50-84.60
Swiss Fr	4.3400-4.3450	4.3400-4.3450
Swedish Kr	4.4890-4.4910	4.4890-4.4875
Yen	195.00-195.85	195.40-195.40
Austria Sch	13.80-13.89	13.85-13.87
Swiss Fr	1.6564-1.6580	1.6570-1.6580
* U.S. cents per Canadian \$.		



The year of the poor man's cake

BY LODESTAR

"LET THEM EAT CAKE," might well have been the advice taken in the mining investment scene during this past year of world economic slowdown and uncertainty surrounding paper currencies in general and the U.S. dollar in particular. Indeed, the flight from the dollar has been the major reason for the big revival seen in demand for those up-market commodities, gold, platinum and diamonds.

Not that it has been plain sailing—far from it. The gold price, for instance, has been a roller coaster since \$164 an ounce at the beginning of the year to an all-time high in October of \$345 only to run out of steam following U.S. moves to bolster the ailing dollar.

Inevitably, these included increased sales of the non-monetary metals and the bullion price now of \$207 awaits with some caution the outcome of tomorrow's biggest ever monthly offering of 1.5m ounces by the U.S. Treasury. Meanwhile, the South African gold share market remains depressed by other unknowns, notably African political developments and the fear, for a UK investor, of the investment dollar premium departing in due course.

The Gold Mines index thus stands at only 139.7 compared with its mid-August high of 306.6. In expatriate form, however, the index is at a smaller discount to its August peak which suggests that overseas investors are prepared to take a more philosophical view of things while they enjoy high dividend yields from this still prosperous industry.

Platinum has followed gold to a large extent, but a major factor in this case has been the impact of the previous market supply position of a cessation of Russian exports which supply the free market. The price in the free market is currently around \$336 an ounce compared with an October high of \$599 and \$185 at the beginning of the year.

The price charged by the leading producers, however, has marched steadily forward from \$180 this year to \$300. Demand has revived and there has been a dramatic improvement in the sales of South African Rustenburg Platinum Mines. But what remains to be seen is how well the market will absorb Russian supplies when they eventually make a full return.

Demand for diamonds has earlier in the year, dealers were

Motor insurance will be dearer

BY OUR INSURANCE CORRESPONDENT

ONE CERTAINLY in this last shopping week before Christmas is that the pound in your pocket will be worth appreciably less in the New Year.

The best that can be hoped, but not now surely expected, is that the annual rate of inflation will continue to run at about 8 per cent.

The worst that remains to be seen, but perhaps the worst of all, is that the likely course of wage negotiations in the next three months will not be realised.

Another certainty must be that present motor insurance premiums by the companies and underwriters in the market will be insufficient to contain costs in the New Year for more than a few months.

Take for example Eagle Star's new rates, increased by 8 per cent from January 1.

Assuming that Eagle Star is poised to show working profit on its motor underwriting, this 8 per cent can be adequate only if national inflation continues at the same level as in 1978; only if car prices and repair costs continue to move in step with national inflation; only if compensation awards also keep pace only if claims incidence does not worsen.

A lot of ifs, and I cannot see that Eagle Star policyholders can hope that their company will hold its January 1 rates beyond the summer months.

No motor-insurer likes to change rates more than once a year because more frequent changes impose on a percentage of policyholders' losses. The increase in 1979 face an average increase of 21 per cent over the premiums they paid last year.

My researches are correct, Eagle Star is the fifth motor-insurer this year to increase, or announce an increase in, its rates within the 12 months.

The others are Legal and General, Scottish General, and Zurich. Though the latter's second increase at the moment applies not to renewals but only to new policyholders.

Both Sun Alliance and Scottish General policyholders now renewing face an average cumulative increase of over 18 per cent. Both companies' second increases in the year came into effect on October 1.

World Stock Markets

Indices

NEW YORK—DOW JONES

Dec. 15	Dec. 14	Dec. 13	Dec. 12	Dec. 11	Dec. 10	High	Low	1978	Since Completion
Ind. 100	108.32	108.78	108.95	107.31	107.87	118.71	95.52	104.84	5.53
Comp. 100	95.52	95.06	95.06	95.06	97.11	101.08	82.08	111.63	10.55

—Basis of Index changed from Aug. 24

Day's high 115.70 low 90.10

Ind. div. yield 5.97

Long Gov. bond yield 8.84

STANDARD AND POORS

Dec. 15	Dec. 14	Dec. 13	Dec. 12	Dec. 11	Dec. 10	High	Low	1978	Since Completion
Ind. 100	108.32	108.78	108.95	107.31	107.87	118.71	95.52	104.84	5.53
Comp. 100	95.52	95.06	95.06	95.06	97.11	101.08	82.08	111.63	10.55

Ind. div. yield 5.14

Long Gov. bond yield 8.84

EUROPE

AMSTERDAM

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

BRUSSELS/LUXEMBOURG

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

SPAIN

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

COPENHAGEN

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

VIENNA

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

CANADA

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

MILAN

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

PARIS

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

OSLO

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

STOCKHOLM

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

SWITZERLAND

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

AUSTRALIA

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

JOHANNESBURG

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

INDONESIA

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

NEW ZEALAND

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

UNITED STATES

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

UNITED KINGDOM

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

WEST GERMANY

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

YUGOSLAVIA

Dec. 15	Price	+ or -	Div. Yld.
Abn. (FL20)	108.0	+0.7	5.1
Alk. (FL20)	77.2	-0.2	5.1
Alk. (FL20)	77.2	-0.2	5.1

Notes: Overhead prices exclude 2% premium. Dividend yields are based on 1978 dividends.

Post Office cuts rates for Christmas

THE POST OFFICE has announced cheaper telephone and telegram rates over the Christmas period.

Lower cost telephone calls, for example, can be made between 6 pm on December 22 to 8 pm on December 23.

The other is Legal and General, Scottish General, and Zurich. Though the latter's second increase at the moment applies not to renewals but only to new policyholders.

Both Sun Alliance and Scottish General policyholders now renewing face an average cumulative increase of over 18 per cent. Both companies' second increases in the year came into effect on October 1.

My researches are correct, Eagle Star is the fifth motor-insurer this year to increase, or announce an increase in, its rates within the 12 months.

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WALL STREET

NEW YORK

High	Low	Stock	Dec. 15
39	25	Admiral	34.5
32	15	Admiral	22
45	30	Admiral	39
31	18	Admiral	24
35	22	Admiral	35.5
58	38	Admiral	46
31	18	Admiral	24
20	10	Admiral	16
44	28	Admiral	29
37	18	Admiral	24
35	22	Admiral	30.5
51	31	Admiral	45
53	33	Admiral	45.5
19	10	Admiral	15.5
58	38	Admiral	51.5
62	42	Admiral	55
43	28	Admiral	46
32	15	Admiral	26.5
35	22	Admiral	23.5
36	22	Admiral	23.5
32	15	Admiral	26.5
40	20	Admiral	30.5
38	20	Admiral	30.5
38	20	Admiral	30.5
7	5	Admiral	4.5
45	30	Admiral	41.5
37	18	Admiral	24
37	18	Admiral	32
47	27	Admiral	30.5
23	12	Admiral	16.5
39	24	Admiral	32.5
47	27	Admiral	30.5
23	12	Admiral	16.5
39	24	Admiral	32.5
47	27	Admiral	30.5
31	15	Admiral	26.5
27	17	Admiral	25.5
27	17	Admiral	25.5
30	18	Admiral	27
19	9	Admiral	15.5
20	10	Admiral	16
57	43	Admiral	53.5
56	42	Admiral	52
34	15	Admiral	20.5
61	44	Admiral	54.5
57	43	Admiral	50.5
31	16	Admiral	20.5
37	22	Admiral	35.5
29	14	Admiral	27.5
28	13	Admiral	27.5
25	12	Admiral	23.5
31	16	Admiral	27.5
23	12	Admiral	16.5
51	31	Admiral	45
26	14	Admiral	20.5
74	25	Admiral	70
33	22	Admiral	30
41	25	Admiral	36
34	25	Admiral	28.5
18	12	Admiral	13.5
39	22	Admiral	33.5
19	10	Admiral	15.5
16	12	Admiral	13.5
21	15	Admiral	15.5
45	35	Admiral	37
86	58	Admiral	71.5
21	14	Admiral	20.5
12	9	Admiral	12.5
21	15	Admiral	20.5
15	10	Admiral	12.5
64	45	Admiral	56.5
64	45	Admiral	56.5
17	14	Admiral	15.5
24	18	Admiral	20.5
26	19	Admiral	22.5
44	36	Admiral	40.5
37	29	Admiral	35.5
35	26	Admiral	32.5
39	29	Admiral	35.5
37	29	Admiral	35.5
39	29	Admiral	35.5
18	11	Admiral	13.5
31	25	Admiral	26.5
22	15	Admiral	16.5
13	8	Admiral	8.5
29	20	Admiral	25.5
28	19	Admiral	24.5
40	31	Admiral	36.5
30	22	Admiral	27.5
30	22	Admiral	27.5
16	8	Admiral	10.5
25	13	Admiral	14
26	14	Admiral	15.5
44	35	Admiral	37.5
26	14	Admiral	15.5
37	26	Admiral	27.5
16	8	Admiral	10.5
44	35	Admiral	37.5
26	14	Admiral	15.5
37	26	Admiral	27.5
16	8	Admiral	10.5
44	35	Admiral	37.5
26	14	Admiral	15.5
37	26	Admiral	27.5
16	8	Admiral	10.5
44	35	Admiral	37.5
26	14	Admiral	15.5
37	26	Admiral	27.5
16	8	Admiral	10.5
44	35	Admiral	37.5
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16	8	Admiral	10.5
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44	35	Admiral	37.5
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16	8	Admiral	10.5







## OFFSHORE AND OVERSEAS FUNDS

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NOTICE



## IMPS Boards' changes

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## BANKS & HP—Continued

## CHEMICALS, PLASTICS—Cont.

## ENGINEERING—Continued

## FOOD, GROCERIES—Cont.

## BRITISH FUNDS

## "Shorts" (Lives up to Five Years)

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## AMERICANS

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## Hire Purchase, etc.

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## DRAPERY AND STORES

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## BEERS, WINES AND SPIRITS

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## HOTELS AND CATERERS

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## INDUSTRIALS (Miscel.)

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## Over Fifteen Years

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## Undated

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## INTERNATIONAL BANK

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## CORPORATION BONDS

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## COMMONWEALTH & AFRICAN LOANS

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

## Public Bonds and Ind.

Stock	Price	Yield	Int. Rate
151 100 Treasury 5% 1981	97 1/2	11.51	11.51
152 100 Treasury 5% 1982	97 1/2	11.51	11.51
153 100 Treasury 5% 1983	97 1/2	11.51	11.51
154 100 Treasury 5% 1984	97 1/2	11.51	11.51
155 100 Treasury 5% 1985	97 1/2	11.51	11.51
156 100 Treasury 5% 1986	97 1/2	11.51	11.51
157 100 Treasury 5% 1987	97 1/2	11.51	11.51
158 100 Treasury 5% 1988	97 1/2	11.51	11.51
159 100 Treasury 5% 1989	97 1/2	11.51	11.51
160 100 Treasury 5% 1990	97 1/2	11.51	11.51

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**FINANCE, LAND—Continued**[illegible][illegible]

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Se at Fraser	12	Trust Houses	15	Rio T. Zinc	3.6

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## Brewers seek extra 3p on beer

By Our Consumer Affairs Correspondent

PRICE RISES of 3p on a pint of beer on average are likely to be sought by the big brewers early in the New Year when the voluntary price freeze agreed with the Government earlier this year ends.

The freeze had been agreed with the big brewers because of concern that beer prices — a politically emotive subject — had appeared to rise every few months as the big brewers leaptfrogged one another's increases.

After the Price Commission's probe last year into beer prices followed by top-level talks between brewers and Mr. Roy Hattersley, Secretary for Prices, a general measure of agreement was reached whereby the brewers would hold prices until early next month.

The brewers are then expected each to notify the Price Commission of their intention of seeking a price rise to cover cost increases over the last year. Their case will rest on a 27 per cent Wages Council award for bar staff, adding 1p to a pint, plus 1p to cover extra costs of raw materials such as malting barley, and 1p extra for licensee's increased costs.

The Price Commission will have to decide whether or not to investigate the proposed increases or to allow them to go ahead.

Last year it took as a "test-case" the rises planned by Allied Breweries, which was allowed to increase prices by an average 7.4 per cent, while allowing other brewers to put up prices unchanged.

This year with the prospect of a General Election, the Commission will be under pressure to carry out a further probe into the price increases even though there seems little doubt that the rises will be allowed.

After agreeing to freeze prices for almost a year, brewers can justify the increases on the basis of extra costs.

## U.S.-China accord may hinder UK trade efforts

By Michael Cassell

THE MOVE to establish normal relations between the U.S. and China will be greeted with mixed feelings by British industry. Although it should provide further impetus to China's policy of increasing the scale of her trade with the Western world generally, the full participation of the Americans will inevitably increase competition for Chinese business.

The Department of Trade would say last night only that it would consider the implications of the move, but some officials are known to be concerned over its likely impact on British efforts to step up trade. Enthusiasm over prospects for two-way trade between China and the UK has recently reached a new peak, with last month's outline agreement between both governments that the volume of business in the next seven years should become three or four times the present level.

In the first nine months of this year, the UK exported goods worth £82m to China, while Chinese imports reached £78m.

Trade between the two countries is altogether worth £200m a year, but the recent top-level mission from Peking has paved the way for opening up sales in more than a dozen areas, from power generating steel, agricultural equipment and ships, to defence equipment, electronics and railways.

The Americans are sure to prove tough competitors in many of those areas, although the recent UK-Chinese agreement, due to be signed soon, should at least guarantee substantial volumes of business in the medium term.

There has been no agreement that trade should balance and it seems likely that British exports will outweigh imports. The value of two-way trade between now and 1985 might reach £5bn, representing an annual rate as high as £700m. A Chinese mission headed by Mr. Lu Tung, who is responsible for aviation matters, is in the UK visiting the aerospace industry, which it is hoped will eventually win substantial orders from China.

The Chinese have expressed a particular interest in the Harrier vertical-takeoff strike aircraft, although the British Government has not said whether it is prepared to sanction such a politically sensitive deal.

## Britain and Ireland again discuss exchange control

BY MICHAEL BLANDEN

THE UK authorities will hold further talks today with their Irish counterparts to examine the technical implications of Ireland's decision to join the European Monetary System.

The main issue is whether the UK Treasury will have to impose exchange controls on transactions with Ireland, ending the effective identity between the currencies of the two countries.

In Friday's announcement, the Irish Government indicated that it hoped to maintain parity between the Irish pound and sterling, at least in the short term.

This could be possible as long as the English pound remained within the permitted band of fluctuations in the EMS.

But, at the same time, Ireland itself imposed vigorous exchange controls on dealings with the UK, designed to prevent heavy flows of funds.

The possibility of substantial speculative flows might force the UK authorities to take parallel action.

The British authorities were prepared for the need to impose

controls when the main discussions on the EMS took place nearly a fortnight ago. It would not, in principle, present major problems to include transactions with Ireland in the battery of restrictions already in force.

This would, however, have important implications for relationships between two economies which have been closely linked for centuries, and would create a number of practical difficulties.

### Portfolio investment

The controls, based on the 1947 Exchange Control Act, impose restraints on investments abroad in relation to purchases of foreign currency securities and direct investment by industry and commerce.

One of the main areas of uncertainty will arise over portfolio investment and the dollar premium. Under the present rules, UK residents can invest in foreign currency securities effectively in only two ways.

These are by borrowing the

necessary foreign currency or by buying it through the pool of investment currency which, because of its limited size, commands a premium over the spot exchange rate for sterling.

The conditions imposed mean that, in practice, for personal investors, the premium pool is the only method open.

Problems could also arise because of the intimate commercial connections between the two countries which include, for example, the overlap of the banking systems.

Stewart Dalby writes from Dublin: Ireland has been trying over the weekend to work out the implications of exchange controls against Britain.

The small Irish stock exchange is expected to be closed today, and although the banks will be functioning normally, foreign exchange dealings will probably be circumscribed. Transactions will be allowed only for normal trading purposes.

Should Britain decide that all investments in Irish gilts and equities must go through the

dollar investment pool and pay premium, then it could cut off the flow of funds into these markets.

### Guidance

In the last few months more than £200m has flooded in to the small markets in expectation that capital gains could be made if the break with sterling became effective. Whether existing holders of Irish gilts will be able to sell at a premium remains to be resolved. Stockbrokers in Dublin will be seeking guidance today from the central bank on whether permission will be given for institutions to undertake portfolio investment. They will also be looking for clarification of what will happen in the cases of the 12 Irish companies which have both London and Dublin quotations.

Trade transactions should not be affected. The amount of money available for deals without central bank permission has been raised from £2,000 to £10,000.

## Belgians vote on language crisis

By Giles Merritt

BRUSSELS—Belgium went to the polls yesterday in the General Election precipitated by the mid-October resignation from the premiership of M. Leo Tindemans over the perennial issue of the language divide between Dutch-speaking Flemings and French-speaking Walloons.

But it is unlikely that any new coalition Government will be formed to take over from the present caretaker administration of M. Paul Vanden Boeynants until at least the New Year.

The proportional representation elections, in which voting is mandatory, are to the Belgian Parliament and the provincial councils. In the key vote to the Lower House, a slight strength is expected of the Social Christians, Belgium's equivalent of Christian Democrats.

The party's French-speaking PSC wing is led by M. Vanden Boeynants and M. Tindemans belongs to CVP, the Flemish side. It is nevertheless likely that a six-party coalition, comparable to that formed by M. Tindemans in April last year, will be required.

## Benn's NEC disclosure plan 'too expensive'

BY RICHARD EVANS, LOBBY EDITOR

A CONTROVERSIAL plan put forward by Mr. Anthony Wedgwood Benn, Energy Secretary, to make all the minutes of the Labour Party's National Executive and all its committees available to constituency parties and affiliated trade unions, would cost the party a crippling £11,000 a year, according to Mr. Ron Hayward, general secretary.

The proposal, made jointly by Mr. Benn and Mr. Frank Allaun, this year's party chairman, has been accepted already by the organisation sub-committee and will go for final approval before the full National Executive on Wednesday.

Critics have opposed the plan on the ground that members would be free to state their views on sensitive issues in private, as in Cabinet, but become a decisive one in view of the issue of cost could now of the party's dire financial circumstances.

Mr. Hayward's obvious horror

at the proposal's implications is contained in a letter sent yesterday to Mr. Leslie Huxford, a new member of the NEC, who had complained about overcrowded agendas and the way crucial decisions were frequently taken "on the nod" because of lack of time.

The general secretary, accepting the criticisms of the present chaotic state of party business, says that the volume of paper was increasing no matter how hard he tried to curb it, and it would increase considerably should the Benn/Allaun proposal be accepted.

The circulation of all minutes would involve the sending of over 700 sets of documents a month at a cost of £987. It would also mean taking on more staff and machines, bringing the total to over £1,000 for each of the 11 months the Executive sat.

Some members of the NEC are regarding the argument as

a classic example of Mr. Benn's passionate and sincere advocacy of maximum disclosure and democracy without taking full account of the implications.

The NEC's main business on Wednesday will be a discussion of what amounts to a draft party manifesto, much of it very left-wing in character, involving the nationalisation of large sections of industry including the banks, insurance companies and all development land.

Mr. Callaghan's prime concern will be to neutralise the Left by insisting that no manifesto be drafted until shortly before a General Election.

After the NEC meeting, there will be a joint meeting on Wednesday between representatives of the executive and seven senior Ministers to establish "areas where there is common agreement" and to decide where further discussions on future policy need to take place.

## Applications for 46 sea oil blocks total nearly 100

BY KEVIN DONE, ENERGY CORRESPONDENT

THE sixth round of UK offshore licensing will be an important test of the Government's readiness to encourage the smaller British oil companies to develop greater expertise in offshore exploration.

Applications for exploration licences for the 46 blocks offered were submitted to the Department of Energy last month. However, according to Mr. Anthony Wedgwood Benn, the Energy Secretary, it is likely to be Easter before any licences are granted.

For the first time the Department has published a list of all companies bidding in an offshore licensing round. They total nearly 100.

The conditions under which companies are applying in this round have been complicated by the inclusion of various bidding elements. Oil companies may offer to carry all or part of the British National Oil Corporation's exploration and appraisal costs. They may also offer the corporation more than its initial 51 per cent share in each licence.

The blocks that have attracted most attention are in the Outer Moray Firth and Central North Sea areas.

Several of the smaller British

oil companies, such as Tricentrol and Chuff, are thought to have tried hard to acquire that prime acreage in their attempts to become operators for the first time in the North Sea.

However, they are facing competition from several important established international oil companies. It is thought that some of the smaller companies would be prepared to grant the corporation a larger share in any licence award, up to 65 per cent, and some are also willing to give the corporation the option of buying crude oil production that might result from commercial discoveries.

Few newcomers are in the Department's list of applicants, but among the first-time bidders is Albright and Wilson, the UK chemicals company that was taken over earlier this year by

Tenneco, the U.S. oil and gas conglomerate. It is bidding as a one-third partner in a group with the parent company Tenneco holding the other two thirds.

The group has applied for two blocks, and Tenneco, which has a stake in the Heather Field, is clearly trying to use its new UK subsidiary as a way of making its bid more attractive. Texaco of the U.S., which is developing the Tartan Field, is understood to have filed one of the most comprehensive applications. Several of the blocks on offer have no great prospects, but one or two companies have offered to explore them if in return they are also granted their first-choice acreage.

Apart from Esso, the main absentee, several other companies with North Sea experience are missing from this round.

## Mobil plant for Belgium

BY SUE CAMERON

MOBIL Chemical Europe, part of the U.S.-based Mobil oil group, is to build a 25,000-tonne-a-year polypropylene film plant in Belgium.

The new plant is due to come

on stream in the middle of 1980. Construction is to start immediately. Mobil Chemical Europe said yesterday. The cost of the new plant is not yet known.

Munchen was a special type of barge-carrying ship built in Belgium in 1972. If lost it will be the first big casualty in this class of vessel.

Earlier this year marine insurers in Europe were faced with losses of £25m, on a ship which caught fire while being built at Rotterdam, and £8.5m on the Pantelis A. Lemos at about the time of the Amoco Cadiz incident, which cost £6m.

There was a similar marine mystery in the Pacific three years ago when the tanker Berge Star, costing £14m, vanished without trace until two survivors were later picked up.

## Marine insurers face big loss

FINANCIAL TIMES REPORTER

MARINE INSURERS face a record loss if fears that the cargo ship Munchen sunk last week in the Atlantic storms prove correct. The vessel sent out an SOS on December 12, but so far there has been no sign of wreckage or of survivors among the 28 crew aboard.

The ship's hull and cargo together are valued at £30m-£40m. The previous record loss was the tanker Olympic Eravry which cost insurers £25m when it went aground off Ushant (France) in 1976.

Searches were still going on yesterday for the missing ship. Munchen, owned by Hapag-Lloyd, was on its way from Rotterdam to Savannah, in the U.S., with a cargo of steel and

steel products loaded on 83 barges for onward shipment.

The Institute of London Underwriters said: "The suspected loss will affect both Lloyd's and the UK insurance company market because the risk covered both hull and cargo, and was spread through direct cover and reinsurance into London. It will add further impact to a year in which there have already been many large ship-ping casualties."

Estimates from Germany of the insurance cover are that the Munchen was valued at DM 64m for hull and equipment, plus DM 16m for ancillary costs, making a total of DM 80m (over £20m).

The cargo of steel and steel products was worth between

## THE LEX COLUMN Ireland makes the break

At least Irish coins will still work British vending machines. But a good deal else has now changed since the Irish Government's surprise decision last Friday to go into the EMS after all — and more consequences may follow within the next day or two. Certainly it emerges that last week's dummy foreign exchange run by Barclays was no wasted effort. For a few wild moments on Tuesday Barclays was making a market in Irish pounds against the dollar. Very properly eschewing any judgments about a possible premium or discount relative to sterling, the dealers resorted to the classic ploy of the trader when faced with the unknown — a widening of the spreads. So while sterling was then quoted at \$1.9705/20 the Irish pound hovered at \$1.9700/25. This gave a punt/sterling cross rate of 99.90/100 — and this morning the banks will have the opportunity to explore this market in earnest. But this may not provide a true test for the foreign exchanges will be closed today in Ireland.

The fact that the Irish have imposed such tough exchange controls shows that they are deeply concerned at the difficulties which are likely to be involved in keeping up with the Deutsche Mark. Irish nationals are, for instance, to be cut off from the London stock market, as from all other international stock exchanges, and will have to renounce the proceeds of sales (though apparently institutions will still be able to run overseas portfolios). Maybe the severity of this is transitional — but in the meantime there is the supreme irony that, if these rules are applied strictly, Irish citizens will no longer be able to buy shares in Guinness.

The currency wall erected by the Irish makes life a lot easier for the British authorities. The Irish move was not being regarded yesterday by the Bank of England as something which called for emergency weekend decisions, and official meetings will take place today. There is no question of a flood of money out from the UK to the rest of the EEC and beyond through any "Irish gap". There are, however, some anomalies which need to be cleared up.

As of this morning, after all, Irish citizens living in Ireland are still UK residents for UK foreign exchange purposes. And Irish shares and gilts have not yet been designated foreign currency securities. There could still be speculative opportunities if the confused situation is to be rationalised by applying normal foreign exchange controls to Ireland. Thus Irish investors with foreign (non-UK)

securities may consider selling through the stock market in London and claiming the re-emption on investment currency, before it is denied to them. And British investors can still weigh up the chances of a punt/sterling windfall on Irish securities, a horse on which £200m of British money is already supposed to be riding in the Irish gilts market. For some weeks the Irish dilemma has been having a large influence upon the investment currency market. The likelihood of Irish entry to the EMS has seemed, the more the punt has been depressed by the actual Irish precautionary selling and by the fear of potential profit-taking by UK investors after an enlargement of the premium currency pool. On Monday December 4 the premium dipped to an effective 314 per cent, rose to 39 per cent over the next week following the Brussels breakdown, but last Friday was back to under 35 per cent in very sensitive and confused conditions.

The most recent precedent for a change in the investment currency regulations was the abolition of the old premium-free overseas sterling area in June 1972. Lucky investors overnight gained the premium, and the same has applied occasionally since to shareholders in individual companies which have moved residence abroad (like Thomson Organisation earlier this year). But the administration of the investment currency rules has become much more sophisticated in the past few years, not least because of the need to cut down fraud. It is therefore now open to the authorities to select some cut-off date, such as today's, and restrict the premium to investors who can prove they bought Irish securities subsequently.

Meanwhile the position of Irish investors becomes very difficult. There is only a handful of large-sized companies in Ireland, and few homes for money. By accident or design it should become easier for the Irish Government to siphon off money through sales of gilts. The Irish market will be vulnerable, however, if British holders get their premium windfall and try to cash in.

If the premium gamble fails, the British investors will be left to hope for a currency gain. But for the moment sterling looks stable, and the Irish pound will have a 6 per cent safety margin to move through before it is necessary to make the final break with sterling.

### Opinion poll

Some 65 per cent of professional investors believe that

the next 50-point move by the FT Industrial Ordinary Index will be downwards. This information has been revealed by the first Simon and Coates' General Investors Poll. But according to the interpretation supplied by the brokers this is a bull signal. For Wall Street has much more experience of such polls, and experience has been that when an opinion is held by more than 55 per cent of investors they become "The Crowd". The lesson of history is that "The Crowd" is usually wrong.

The evidence of Simon and Coates' poll is a little confusing, however, because investors were also asked their views on whether the next 25-point and 100-point moves would be up or down, and the bearish proportions were only 41.5 and 31 per cent, respectively. So for the longer term investors are quite bullish — though not enough to be really worrying because only when the bears fall below 25 per cent do the bulls become "The Crowd" with correspondingly sinister implications for the share indices.

This is claimed to be the most widely based stock market poll ever undertaken in the UK, with 176 respondents. But Simon and Coates have better look out: L. Messel have just sent out a gilt-edged questionnaire to 650 institutions and individuals. Perhaps the theory is that if clients cannot be induced to deal actively over Christmas they can at least be persuaded to fill in forms instead.

### OPEC

Expectations about the extent of the OPEC crude oil price rise have fluctuated in recent weeks in line with the vagaries of Iranian production. In the event the hawks appear to have had slightly the upper hand at Abu Dhabi, with the price set to rise a total of 14 per cent over the next nine months. There is a danger that the OPEC nations have misread the strength of underlying demand this autumn, but the phased increases will have the effect of encouraging customers to keep their stocks high. Among the major oil companies, BP will not complain too much, for it stands to benefit both in the North Sea/Forthies field (especially because of the extra premium being attached to light crudes) and, through its 52 per cent stake in Shell's Alaska Monowah, the regular crude price rise could serve to give an artificial boost to quarterly oil company profits next year.

## Weather

UK TODAY

DRY, some rain later. London, S.E. E. Anglia, Cent. S. England, S. Midlands, Channel Is. S.W.

Dry, sunny periods. Max. 7C (45F). E. England, W. Midlands, S. Wales, N. Midlands.

Dry, becoming cloudy later. Max. 7C (45F). N. Wales, Lakes, N.E. and N.W.

Bright at first, rain later. Max. 8C (46F). Isle of Man, E. S. and Cent. Scotland, Argyll, Scottish Is.

Bright intervals, rain, clearing later. Max. 8-8C (43-46F). Highlands, N. Ireland.

Rain, showers in the afternoon. Max. 8C (46F). Outlook: Rain, then sunny intervals, cold.

### BUSINESS CENTRES

	Y'day	Today	Y'day	Today	
Midday			Midday		
Amman	1	34	Madrid	5	46
Athens	1	34	Manila	5	46
Bahrain	1	34	Mexico	19	68
Bombay	1	34	Moscow	19	68
Buenos Aires	1	34	Munich	19	68
Cairo	1	34	New York	19	68
Colombo	1	34	Oslo	19	68
Dakar	1	34	Paris	19	68
Dhaka	1	34	Rangoon	19	68
Hong Kong	1	34	San Francisco	19	68
London	1	34	Singapore	19	68
Luxembourg	1	34	Tokyo	19	68

### HOLIDAY RESORTS

Ajaccio	18	61	Jersey	17	45
Algeria	18	61	Las Palmas	19	65
Bahia	18	61	Malaga	19	65
Bangkok	18	61	Melbourne	19	65
Bordeaux	18	61	Naples	19	65
Buenos Aires	18	61	Niagara	19	65
Calcutta	18	61	Norfolk	19	65
Canton	18	61	Osaka	19	65
Cebu	18	61	Perth	19	65
Dubrovnik	18	61	Porto	19	65
Geneva	18	61	San Francisco	19	65
Hankow	18	61	Singapore	19	65
Hong Kong	18	61	Tokyo	19	65
Kobe	18	61	Toronto	19	65
London	18	61	Vancouver	19	65
Luxembourg	18	61	Vienna	19	65
Madrid	18	61	Zurich	19	65
Manila	18	61			
Moscow	18	61			
Munich	18	61			
New York	18	61			
Osaka	18	61			
Perth	18	61			
Porto	18	61			
San Francisco	18	61			
Singapore	18	61			
Tokyo	18	61			
Toronto	18	61			
Vancouver	18	61			
Vienna	18	61			
Zurich	18	61			

## A few words about Tokai Bank's expanding international operations.

As you might know, Tokai Bank is one of the leading banks in the world with over 15,000 employees and 200 offices established in Japan itself.

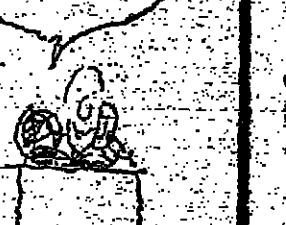
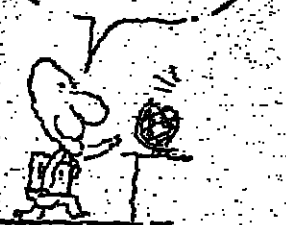
It probably doesn't surprise you we're modern, progressive, and one of the first banks in the world to utilize on-line computerization in our banking operations.

What may surprise you is our commitment to international banking.

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